BUREAU OF AIR POLLUTION CONTROL

Facility ID No. A0765

Permit No. AP4911-2241

CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

Issued to: SIERRA PACIFIC RESOURCES COMPANY, ELY ENERGY CENTER, as Permittee

Section V. Specific Operating Conditions

A. Emission Unit #S2.001 and S2.002 - Two Pulverized Coal Fired Utility Boilers

UTM: North 4,374.813 km, East 690.102 km (Zone 11)

System 01 - Two Pulverized Coal-Fired Utility Boiler, 750 MW Output (Nominal), each.

S2.001 Ultra Super-Critical Steam Utility Boiler, Unit #1, Manufacturer TBD, Model #TBD, Serial #TBD, Unit

Manufactured TBD. 8,710 million Btu/hr - Maximum Heat Input Rate.

S2.002 Ultra Super-Critical Steam Utility Boiler, Unit #2, Manufacturer TBD, Model # TBD, Serial # TBD, Unit

Manufactured TBD. 8,710 million Btu/hr - Maximum Heat Input Rate.

1. NAC 445B.3405

Air Pollution Equipment

- a. Emissions from **S2.001** and **S2.002** shall be ducted to the following emissions control systems with 100% capture and a maximum volume flow rate of **2,246,137** dry standard cubic feet per minute (DSCFM), each:
 - (1) Fabric Filter Baghouse for the control of particulate matter and lead.
 - (2) Wet scrubbing system for the control of sulfur dioxide, hydrogen fluoride and sulfuric acid mist.
 - (3) Selective Catalytic Reduction (SCR) system for the control of oxides of nitrogen (NO_x). The SCR shall utilize ammonia injection into the SCR at a volume needed to comply with the applicable NO_x emission limits.
 - (4) Low-NO_x burners and over-fire air shall be utilized to minimize the formation of NO_x during the combustion process.
 - (5) Activated Carbon injection system shall be utilized for the control of mercury emissions, if required, in order to meet permitted mercury emissions.
 - (6) Dry sorbent injection for improving mercury control.

b. Nominal Stack Parameters (one stack for both units)

Height: 727 ft
Diameter: 36 ft
Exhaust Temperature: 124 °F
Velocity: 55 ft/sec

Volume Flow: 2,246,137 DSCFM, each

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 and S2.002 - Two Pulverized Coal Fired Utility Boilers (continued)

2. NAC 445B.3405

Emission Limits

- a. On and after the date of startup of S2.001 and S2.002, the Permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of S2.001 and S2.002, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of PM (particulate matter) to the atmosphere will not exceed **174.2** pounds per hour, based on a 3-hr averaging period, for each unit.
 - (2) NAC 445B.305 The discharge of PM₁₀ (particulate matter less than 10 microns in diameter), filterable and condensable, to the atmosphere will not exceed **174.2** pounds per hour, based on a 3-hr averaging period, for each unit.
 - (3) NAC 445B.2203(1)(c) The discharge of PM₁₀, filterable and condensable, to the atmosphere will not exceed **0.098** pound per million Btu, based on a 24-hr averaging period, for each unit.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of PM filterable and condensable, to the atmosphere will not exceed **0.02** pound per million Btu, based on a 24-hour averaging period, for each unit.
 - (5) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of PM₁₀ filterable and condensable, to the atmosphere will not exceed **0.02** pound per million Btu, based on a 24-hour averaging period, for each unit.
 - (6) 40 CFR Part 60.42Da(c)(1) and (2) <u>Federally Enforceable New Source Performance Standard Requirement</u> On and after the date on which the initial performance test is completed or required to be completed under 40 CFR Part 60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification after February 28, 2005 shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of either 18 ng/J (0.14 lb/MWh) gross energy output; or 6.4 ng/J (0.015 lb/MMBtu) heat input derived from the combustion of solid, liquid, or gaseous fuel.
 - (7) NAC 445B.22047(3) The discharge of sulfur to the atmosphere will not exceed the following emission limits:
 - a. **5,226.0** pounds per hour, based on a one-hour average, for each unit when combusting solid fuel.
 - b. when combusting a combination of solid and liquid fuels, the allowable emission of sulfur must be calculated by the use of the following equation:

$$Y = \frac{L(0.4X) + S(0.6X)}{L + S}$$

Where: Y is the allowable rate of emissions of sulfur in pounds per hour.

X is the maximum input of the operation in millions of Btu's per hour.

L is the percentage of total input of heat derived from liquid fuel.

S is the percentage of total input of heat derived from solid fuel

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 and S2.002 - Two Pulverized Coal Fired Utility Boilers (continued)

- 2. NAC 445B.3405
 - a. Emission Limits (continued)
 - (8) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of SO₂ to the atmosphere will not exceed **0.06** pound per million Btu, based on a rolling 24-hour averaging period, for each unit.
 - (9) NAC 445B.305 The discharge of SO₂ to the atmosphere will not exceed **696.8** pounds per hour, based on a rolling 3-hour averaging period, for each unit.
 - (10) 40 CFR Part 60.43Da(i)(1) <u>Federally Enforceable New Source Performance Standard Requirement</u> On and after the date on which the initial performance test is completed or required to be completed under 40 CFR Part 60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification commenced after February 28, 2005 shall cause to be discharged into the atmosphere from that affected facility, any gases that contain SO₂ in excess of either 180 ng/J (1.4 lb/MWh) gross energy output on a 30-day rolling average basis.
 - (11) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of NO_x (oxides of nitrogen) to the atmosphere will not exceed **0.06** pound per million Btu, based on a rolling 24-hour averaging period, for each unit.
 - (12) NAC 445B.305 The discharge of NO_x to the atmosphere will not exceed **522.6** pounds per hour, based on a rolling 3-hr averaging period, for each unit.
 - (13) 40 CFR Part 60.44Da(e) <u>Federally Enforceable New Source Performance Standard Requirement</u> On and after the date on which the initial performance test is completed or required to be completed under 40 CFR Part 60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification after February 28, 2005 shall cause to be discharged into the atmosphere from that affected facility any gases that contain NO_X(expressed as NO₂) in excess of 130 ng/J (1.0 lb/MWh) gross energy output on a 30-day rolling average basis
 - (14) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of CO (carbon monoxide) to the atmosphere will not exceed **0.10** pound per million Btu, based on a rolling 24-hour averaging period, for each unit.
 - (15) NAC 445B.305 The discharge of CO to the atmosphere will not exceed **871** pounds per hour, based on a rolling 3-hr averaging period, for each unit.
 - (16) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of VOC (volatile organic compounds) to the atmosphere will not exceed **0.0035** pound per million Btu, based on a 3-hour averaging period, for each unit.
 - (17) NAC 445B.305 The discharge of VOC to the atmosphere will not exceed **30.49** pounds per hour, based on a 3-hr averaging period, for each unit.
 - (18) NAC 445B.305 The discharge of lead to the atmosphere will not exceed **0.23** pounds per hour, based on a 3-hr averaging period, for each unit.

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 and S2.002 - Two Pulverized Coal Fired Utility Boilers (continued)

- 2. NAC 445B.3405
 - a. Emission Limits (continued)
 - (19) 40 CFR Part 60.45Da(a) <u>Federally Enforceable New Source Performance Standard Requirement</u> On and after the date on which the initial performance test required to be conducted under 40 CFR Part 60.8 is completed, *the Permittee* shall not cause to be discharged into the atmosphere from **S2.001** and **S2.002** any gases which contain mercury (Hg) emissions in excess of each Hg emissions limit in paragraphs (i) through (iii) below on a 12-month rolling averaging period.
 - (i) For each coal-fired electric utility steam generating unit that burns only bituminous coal, *the Permittee* must not discharge into the atmosphere any gases from a new affected source that contain Hg in excess of **20** x **10**⁻⁶ pound per megawatt hour (lb/MWh) or 0.020 lb/gigawatt-hour (GWh) on a gross output basis. The International System of Units (SI) equivalent is 0.0025 nanograms per joule (ng/J).
 - (ii) For each coal-fired electric utility steam generating unit that burns only sub-bituminous coal, if your unit is located in a county-level geographical area receiving less than or equal to 25 in/yr mean annual precipitation, based on the most recent publicly available U.S. Department of Agriculture 30-year data, *the Permittee* must not discharge into the atmosphere any gases from a new affected source which contain Hg in excess of **97** x **10**⁻⁶ lb/MWh or 0.097 lb/GWh on an output basis. The SI equivalent is 0.0122 ng/J.
 - (iii) For each coal-fired electric utility steam generating unit that burns a blend of coals from different coal ranks (i.e., bituminous coal, sub-bituminous coal), *the Permittee* must not discharge into the atmosphere any gases from a new affected source that contain Hg in excess of the monthly unit-specific Hg emissions limit established according to paragraph A.2.a.(19)(iii)(a) or (iii)(b) below:
 - (a) *The Permittee* must not discharge into the atmosphere any gases from a new affected source that contain Hg in excess of the computed weighted Hg emissions limit based on the proportion of energy output (in British thermal units, Btu) contributed by each coal rank burned during the compliance period and its applicable Hg emissions limit in paragraphs A.2.a.(19)(i) and (ii) of this section as determined by Equation 1 of this section. *The Permittee* must meet the weighted Hg emissions limit calculated using Equation 1 of this section by calculating the unit emission rate based on the total Hg loading of the unit and the total Btu or megawatt hours contributed by all fuels burned during the compliance period.

Equation 1:
$$EL_b = \frac{\sum_{i=1}^{n} EL_i * HH_i}{\sum_{i=1}^{n} HH_i}$$

Where: **EL**_b is the total allowable Hg in lb/MWh that can be emitted to the atmosphere from any affected source being averaged under the blending provision.

 $\mathbf{EL_i}$ is the Hg emissions limit for the subcategory i (coal rank) that applies to affected source, lb/MWh.

 HH_i is the electricity output from S2.001 and S2.002 during the production period related to use of the corresponding subcategory i (coal rank) that falls within the compliance period, gross MWh generated by S2.001 and S2.002.

 \mathbf{n} is the number of subcategories (coal ranks) averaged for an affected source.

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 and S2.002 - Two Pulverized Coal Fired Utility Boilers (continued)

- 2. NAC 445B.3405
 - a. Emission Limits (continued)

(19)(iii) (continued)

- (b) *The Permittee* must not discharge into the atmosphere any gases from the unit that contain Hg in excess of the computed weighted Hg emission limit based on the proportion of electricity output (in MWh) contributed by each coal rank burned during the compliance period and its applicable Hg emission limit in paragraphs A.2.a.(19)(i) and (ii) of this section as determined using Equation 1 of this section. *The Permittee* must meet the weighted Hg emissions limit calculated using Equation 1 of this section by calculating the unit emission rate based on the total Hg loading of the unit and the total megawatt hours contributed by both regulated and non-regulated fuels burned during the compliance period.
- (20) NAC 445B.305 The discharge of mercury to the atmosphere will not exceed 20×10^{-6} lb/MWh, on a gross output basis, based on a rolling 12-month averaging period.
- (21)NAC 445B.305 <u>BACT Emission Limit</u> The discharge of fluorides (expressed as hydrogen fluoride) to the atmosphere will not exceed **0.0004** pound per million Btu, based on a 3-hour averaging period, for each unit.
- (22) NAC 445B.305 The discharge of hydrogen fluoride to the atmosphere will not exceed **3.48** pounds per hour, based on a 3-hour averaging period, for each unit.
- (23) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of H₂SO₄ (sulfuric acid mist) to the atmosphere will not exceed **0.004** pound per million Btu, based on a 3-hour averaging period, for each unit.
- (24) NAC 445B.305 The discharge of sulfuric acid mist to the atmosphere will not exceed **34.84** pounds per hour, based on a 3-hour averaging period, for each unit.
- (25) NAC 445B.305 The discharge of Hydrogen Chloride to the atmosphere will not exceed **96.78** pounds per hour, based on a 3-hour averaging period, for each unit.
- (26) NAC 445B.22017 The opacity from **S2.001 and S2.002** will not equal or exceed **20**%. The opacity must be determined as set forth in 445B.22017.1(a) or (b). **S2.001 and S2.002** are allowed one 6-minute period per hour of not more than **27** percent opacity as set forth in 40 CFR part 60.42Da(b).
- (27) 40 CFR Part 60.42Da(b) <u>Federally Enforceable New Source Performance Standard Requirement</u> On and after the date the particulate matter performance test required to be conducted by 40 CFR Part 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than **20** percent opacity (6-minute average), except for one 6-minute period per hour of not more than **27** percent opacity.
- (28) 40 CFR Part 60.48Da(c) <u>Federally Enforceable New Source Performance Standard Requirement</u> The particulate matter emission standards under A.2.a.(6) of this section, the nitrogen oxides emission standards under A.2.a.(13) of this section and the Hg emission standards under A.2.a.(19) of this section apply at all times except during periods of startup, shutdown or malfunction.

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 and S2.002 - Two Pulverized Coal Fired Utility Boilers (continued)

3. NAC 445B.3405

Operating Parameters

- a. During all periods except startup, shutdown, or flame stabilization periods, **S2.001** and **S2.002** will combust coal only. Allowable coal types include sub-bituminous and bituminous coals. During startup, shutdown and flame stabilization periods, **S2.001** and **S2.002** may combust ultra low-sulfur distillate fuel with a sulfur content not to exceed **0.0015**% sulfur, by weight, either alone or in combination with coal.
- b. *The Permittee* shall at all times, including periods of startup, shutdown, and malfunction, operate and maintain emission units at the source, including associated air pollution control equipment, in a manner consistent with safety and good air pollution control practices in order to minimize emissions to the levels required by the relevant standards outlined in this permit by operating in accordance with written operation and maintenance procedures, provided it is safe to do so.
- c. These operation and maintenance procedures shall:
 - (1) address startup, shutdown and malfunction events,
 - (2) fulfill applicable requirements of this permit for a startup, shutdown and malfunction plan, including provisions for a review of relevant operating parameters of the boiler systems during a startup, shutdown and malfunction as necessary to make adjustments and corrections to reduce or minimize emissions,
 - (3) provide procedures to address readily foreseeable startup scenarios, and provide for appropriate review of the operational condition of a boiler before initiating startup of the boiler, and
 - (4) direct *the Permittee* to inspect, maintain, and repair the boiler and associated air pollution control equipment in accordance with written maintenance procedures.
- d. Determination of whether such operation and maintenance procedures are being followed by *the Permittee* will be based on the information made available through the excess emission notification and reporting process outlined through within Section III, General Operating Condition, B.4 and B.5 (NAC445B.232)
- e. **S2.001 and S2.002** may operate **8,760** hours per calendar year, for each unit.

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 and S2.002 - Two Pulverized Coal Fired Utility Boilers (continued)

4. NAC 445B.3405

- a. Compliance/Performance Testing
 Within 180 days of initial startup or within 60 days of achieving the maximum rate of production at **S2.001 and S2.002**, whichever is sooner, and after 7,000 hours of operation of additional operation following the initial testing, but not greater than 8,760 hours of additional operation after initial testing of **S2.001 and S2.002**, *the Permittee* shall:
 - (1) Conduct and record a Method 5 performance test for PM on the exhaust stack of **S2.001** and **S2.002** consisting of three valid runs. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5, and include the back-half catch. Compliance with the particulate matter standards contained in A.2.a.(1) through (6) shall be determined by using the dry basis F factor (O₂) procedures in Method 19 to compute the emissions rate. Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 120 minutes and 1.70 dscm (60 dscf). The probe and filter holder heating system in the sampling train may be set to provide an average gas temperature of $160 \pm 14^{\circ}$ C ($320 \pm 25^{\circ}$ F). For each particulate run, the emission rate correction factor, integrated or grab sampling and analysis procedures of Method 3B shall be used to determine the O₂ concentration. The O₂ sample shall be obtained simultaneously with, and at the same traverse points as, the particulate run. If the particulate run has more than 12 traverse points, the O₂ traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O₂ traverse points (40 CFR Part 60.50Da(b)). The daily coal sampling required in A.4.c.(3) of this section shall be performed during this test.
 - (2) Conduct and record a Method 201A and 202 performance test for PM₁₀ on the exhaust stack of **S2.001 and S2.002** consisting of three valid runs. The Method 201A and 202 emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201A and 202. The Method 201A and 202 emissions tests may be replaced by the Method 5 performance test required in A.4.a.(1) above. All particulate captured in the Method 5 test will be considered PM₁₀ for compliance demonstration purposes.
 - (3) Conduct and record a Method 6 or 6C performance test for SO₂ on the exhaust stack of **S2.001 and S2.002** consisting of three valid runs. The Method 6 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 6 or 6C.
 - (4) Conduct and record a Method 25 or 25A performance test for VOC on the exhaust stack of **S2.001 and S2.002** consisting of three valid runs. The Method 25 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 25 or 25A.
 - (5) Conduct and record a Method 29 performance test for Pb on the exhaust stack of **S2.001** and **S2.002** consisting of three valid runs. The Method 29 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 29.
 - (6) Conduct and record a Method 26A performance test for HF and HCl on the exhaust stack of **S2.001 and S2.002** consisting of three valid runs. The Method 26A emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 26A.
 - (7) Conduct and record a Method 8 performance test, Controlled Condensate Procedure test, CAE Method 8A, or an alternative test method that has been approved prior to test for H₂SO₄ on the exhaust stack of **S2.001 and S2.002** consisting of three valid runs.

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 and S2.002 - Two Pulverized Coal Fired Utility Boilers (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

- a. Compliance/Performance Testing (continued)
 - (8) During each compliance test, record the opacity of the discharge from the exhaust stack of **\$2.001** and **\$2.002** using either a calibrated continuous opacity monitor or a visible emissions evaluation conducted in accordance with 40 CFR Part 60, Appendix A, Method 9. The Method 9 visible emissions test must be conducted by a certified visible emissions reader for a period of at least 3 hours (30 6-minute averages).
 - (9) The performance tests will be conducted at the maximum operating heat input rate limit established in A.3.b. of this section for each pollutant required to be tested, unless otherwise approved pursuant to NAC 445B.252.2 & 3. *The Permittee* shall make available to the director such records as may be necessary to determine the conditions of the test of performance. Operations during periods of startup, shutdown and malfunction must not constitute representative conditions of a test of performance unless otherwise specified in the applicable standard (NAC 445B.252.3).
 - (10) *The Permittee* shall give notice to the director 30 days before the performance test to allow the director to have an observer present. A written testing procedure for the performance test must be submitted to the director at least 30 days before the performance test to allow the director to review the proposed testing procedures (NAC 445B.252.4). The alternative to the reference methods and procedures provided in 40 CFR Part 60.50Da(e) may be utilized to the extent that they are applicable to **S2.001** and **S2.002**, and must be identified in the testing procedures as alternative methods.
 - (11) During each performance test required in A.4.a.(1) through (7) of this section, record the quantity (in tons) of coal combusted during each test run, the heat content value of the coal combusted during each test run (in Btu/ton) and include these data in the test results submitted. The emissions results of the Method 6 performance test for SO₂ must be converted to emissions of sulfur (both lb/hr and lb/MMBtu). The emissions results of the Method 5 or Method 201A and 202 performance test for PM₁₀ must be reported in lb/MMBtu.
 - (12) As a result of the most recent performance test performed in A.4.a.(1) and (2) of this section, derive emission factors for each of the following:
 - (i) Pounds of PM per ton of coal (lbs-PM/tons-coal), filterable and condensable.
 - (ii) Pounds of PM per ton of coal (lbs-PM/tons-coal), filterable only.
 - (iii) Pounds of PM₁₀ per ton of coal (lbs-PM₁₀/tons-coal), filterable and condensable.
 - (iv) Pounds of PM₁₀ per ton of coal (lbs-PM₁₀/tons-coal), filterable only.

These emissions factors will be based on the average of the 3 test runs.

(13) Within 60 days after completing the performance tests and opacity observations contained in A.4.a. of this section, *the Permittee* shall furnish the director a written report of the results of the performance tests, the opacity observations, and the resultant emissions factors. All information and analytical results of testing and sampling must be certified as to the truth and accuracy and as to their compliance with NAC 445B.001 to 445B.3791 (NAC 445B.252.8).

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 and S2.002 - Two Pulverized Coal Fired Utility Boilers (continued)

4. NAC 445B.3405

- NSPS Subpart Da Compliance/Performance Testing
 Within 60 days after achieving the maximum production rate at which S2.001 and S2.002 will be operated, but not later
 than 180 days after initial startup of S2.001 and S2.002, the Permittee shall:
 - (1) *The Permittee* will comply with the particulate matter standard in §60.42Da(c)(2) and shall demonstrate compliance with such standard according to the requirements in paragraphs (o)(1), (o)(2) and (o)(4) of 40 CFR Part §60.48Da. (§60.48Da(o), Compliance provisions; NSPS requirement). *The Permittee* shall:
 - (i) §60.48Da(o)(1) Conduct a performance test to demonstrate initial compliance according to the requirements of §60.50Da by the applicable date specified in §60.8(a). Thereafter, *the Permittee* must conduct each subsequent performance test within 12 calendar months of the date of the prior performance test.
 - (ii) <u>§60.48Da(o)(2)</u> Use opacity monitoring equipment as an indicator of continuous particulate matter control device performance and demonstrate compliance with §60.42Da(b). During each performance test conducted according to paragraph (o)(1) an opacity baseline level must be established. The value of the opacity baseline level is determined by averaging all of the 6-minute average opacity values (reported to the nearest 0.1 percent opacity) from the COMS measurements recorded during each of the test run intervals conducted for the performance test, and then adding 2.5 percent opacity to your calculated average opacity value for all of the test runs. If your calculated average opacity value for all of the test runs is less than 5.0 percent, then the opacity baseline level is set at 5.0 percent. If the measured 24-hour average opacity for your affected source remains at a level greater than the opacity baseline level after 7 days, then you must conduct a new PM performance test according to paragraph (o)(1) of this section and establish a new opacity baseline value according to paragraph (o)(2) of this section. This new performance test must be conducted within 60 days of the date that the measured 24-hour average opacity was first determined to exceed the baseline opacity level unless a wavier is granted by the appropriate delegated permitting authority. The new baseline shall not exceed the opacity limit specified in §60.42Da(b)
 - (2) *The Permittee* shall determine compliance with the particulate matter standards in §60.42Da as follows:
 - (i) $\underline{\$60.50Da(b)(1)}$ The dry basis F factor (O₂) procedures in Method 19 shall be used to compute the emission rate of particulate matter.
 - (ii) §60.50Da(b)(2) For the particulate matter concentration, Method 5 shall be used.
 - (iii) $\underline{\$60.50Da(b)(2)(i)}$ The sampling time and sample volume for each run shall be at least 120 minutes and 1.70 dscm (60 dscf). The probe and filter holder heating system in the sampling train may be set to provide an average gas temperature of no greater than 160 ± 14 °C (325 ± 25 °F).
 - (iv) §60.50Da(b)(2)(ii) For each particulate run, the emission rate correction factor, integrated or grab sampling procedures of Method 3B shall be used to determine the O₂ concentration. The O₂ sample shall be obtained simultaneously with, and at the same traverse points as, the particulate run. If the particulate run has more than 12 traverse points, the O₂ traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O₂ traverse points. If the grab sampling procedure is used, the O₂ concentration for the run shall be the arithmetic mean of the sample O₂ concentrations at all traverse points.
 - (v) §60.50Da(b)(3) Method 9 and the procedures in §60.11 shall be used to determine opacity. A calibrated continuous opacity monitor may be used as an alternative to conducting a Method 9.
 - (vi) §60.50Da(e) *The Permittee* may use the following as alternatives to the reference methods and procedures specified in this section:
 - (1) §60.50Da(e)(1) For Method 5 or 5B, Method 17 may be used if the stack temperature at the sampling location does not exceed an average temperature of 160 °C (320 °F). The procedures of §§2.1 and 2.3 of Method 5B may not be used in Method 17.
 - (2) §60.50Da(e)(2) The Fc factor (CO₂) procedures in Method 19 may be used to compute the emission rate of particulate matter under the stipulations of §60.46(d)(1). The CO₂ shall be determined in the same manner as the O₂ concentration.

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 and S2.002 - Two Pulverized Coal Fired Utility Boilers (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

- b. NSPS Subpart Da Compliance/Performance Testing (continued)
 - (3) The Permittee shall determine compliance with the SO₂ standards in §60.43Da as follows:
 - (i) <u>\$60.48Da(f)</u> For the initial performance test required under §60.8, compliance with the sulfur dioxide emission limitations and percent reduction option under §60.43Da is based on the average emission rates for sulfur dioxide and percent reduction for sulfur dioxide for the first 30 successive boiler operating days. The initial performance test is the only test in which at least 30 days prior notice is required unless otherwise specified by the Administrator. The initial performance test is to be scheduled so that the first boiler operating day of the 30 successive boiler operating days is completed within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility.
 - (ii) §60.48Da(e) After the initial performance test required under §60.8, compliance with the sulfur dioxide emission limitations and percentage reduction option under §60.43Da is based on the average emission rate for 30 successive boiler operating days. A separate performance test is completed at the end of each boiler operating day after the initial performance test, and a new 30 day average emission rate for both sulfur dioxide and a new percent reduction for sulfur dioxide are calculated to show compliance with the applicable standards.
 - (iii) $\S60.48Da(g)$ The Permittee shall determine compliance with the SO_2 standards in $\S60.43Da$ as follows:
 - (1) §60.48Da(g)(1) Compliance with applicable 30-day rolling average SO₂ emission limitation is determined by calculating the arithmetic average of all hourly emission rates for SO₂ for the 30 successive boiler operating days, except for data obtained during startup, shutdown or emergency conditions.
 - (2) §60.50Da(g)(2) Compliance with applicable SO₂ percentage reduction requirements is determined based on the average inlet and outlet SO₂ emission rates for the 30 successive boiler operating days.
 - (iv) §60.48Da(m) *The Permittee* shall calculate SO₂ emissions by multiplying the average SO₂ output concentration, measured according to the provisions of §60.49Da(b), by the average hourly flow rate, measured according to the provisions of §60.49Da(l), and divided by the average hourly gross energy output, measured according to the provisions of §60.49Da(k).
 - (4) As applicable, *the Permittee* shall determine compliance with the SO₂ standards in §60.43Da as follows:
 - (i) $\underline{\$60.50Da(c)(1)}$ The percent of potential SO₂ emissions (%P_s) to the atmosphere shall be computed using the following equation:

$$%P_s = [(100 - %R_f) (100 - %R_g)] / 100$$

Where: $%\mathbf{P}_{s}$ = percent of potential SO₂ emissions, percent.

 $% \mathbf{R_f} = \text{percent reduction from fuel pre-treatment, percent.}$

 $\Re \mathbf{R}_{g}$ = percent reduction by SO₂ control system, percent.

(ii) §60.50Da(c)(2) The procedures in Method 19 may be used to determine percent reduction (%R_f) of sulfur by such processes as fuel pre-treatment (physical coal cleaning, hydro-de-sulfurization of fuel oil, etc.), coal pulverizers and bottom and fly ash interaction. This determination is optional.

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 and S2.002 - Two Pulverized Coal Fired Utility Boilers (continued)

4. NAC 445B.3405

- b. NSPS Subpart Da Compliance/Performance Testing (continued)
 - (4) As applicable, the Permittee shall determine compliance with the SO₂ standards in §60.43Da as follows: (continued)
 - (iii) §60.50Da(c)(3) The procedures in Method 19 shall be used to determine the SO₂ percent reduction (%R_g) of any SO₂ control system. Alternatively, a combination of an "as fired" fuel monitor and emission rates measured after the control system, following the procedures in Method 19, may be used if the percent reduction is calculated using the average emission rate from the SO₂ control device and the average SO₂ input rate from the "as fired" fuel analysis for 30 consecutive boiler operating days.
 - (iv) §60.50Da(c)(4) The appropriate procedures in Method 19 shall be used to determine the emission rate of SO₂.
 - (v) §60.50Da(c)(5) The continuous monitoring system in §60.49Da(b) and (d) shall be used to determine the concentrations of SO₂ and CO₂ or O₂.
 - (5) Per 40 CFR §60.48Da(g)(1), compliance with the applicable 30-day rolling average SO₂ emission limitation under §60.43Da is determined by calculating the arithmetic average of all hourly emission rates for SO₂ for the 30 successive boiler operating days, except for data obtained during startup, shutdown or emergency conditions.
 - (6) The Permittee shall determine compliance with the NO_x standards in §60.44Da as follows:
 - (i) §60.48Da(f) For the initial performance test required under §60.8, compliance with the nitrogen oxides emission limitation under §60.44Da is based on the average emission rates for nitrogen oxides for the first 30 successive boiler operating days. The initial performance test is the only test in which at least 30 days prior notice is required unless otherwise specified by the Administrator. The initial performance test is to be scheduled so that the first boiler operating day of the 30 successive boiler operating days is completed within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility.
 - (ii) §60.48Da(e) After the initial performance test required under §60.8, compliance with the nitrogen oxides emission limitations under §60.44Da is based on the average emission rate for 30 successive boiler operating days. A separate performance test is completed at the end of each boiler operating day after the initial performance test, and a new 30 day average emission rate for nitrogen oxides is calculated to show compliance with the applicable standards.
 - (iii) <u>§60.48Da(g)</u> The owner or operator of an affected facility subject to emission limitations in this subpart shall determine compliance as follows:
 - (1) $\underline{\$60.48Da(g)(1)}$ Compliance with applicable 30-day rolling average NO_x emission limitation is determined by calculating the arithmetic average of all hourly emission rates for NO_x for the 30 successive boiler operating days, except for data obtained during startup, shutdown or emergency conditions.
 - (iv) §60.48Da(i) *The Permittee* shall calculate NO_x emissions by multiplying the average hourly NO_x output concentration, measured according to the provisions of §60.49Da(c), by the average hourly flow rate, measured according to the provisions of §60.49Da(l), and divided by the average hourly gross energy output, measured according to the provisions of §60.49Da(k).

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Section V. Specific Operating Conditions (continued)

- A. Emission Unit #S2.001 and S2.002 Two Pulverized Coal Fired Utility Boilers (continued)
 - 4. NAC 445B.3405
 - Compliance, Monitoring, Recordkeeping and Reporting
 - b. NSPS Subpart Da Compliance/Performance Testing (continued)
 - (7) The Permittee shall determine compliance with the NO_x standards in §60.44Da as follows:
 - (i) §60.50Da(d)(1) The appropriate procedures in Method 19 shall be used to determine the emission rate of NO_x.
 - (ii) $\S60.50Da(d)(2)$ The continuous monitoring system in $\S60.49Da(c)$ and (d) shall be used to determine the concentrations of NO_x and CO_2 or O_2 .
 - (8) Per 40 CFR $\S60.48Da(g)(1)$, compliance with the applicable 30-day rolling average NO_x emission limitation under $\S60.44Da$ is determined by calculating the arithmetic average of all hourly emission rates for NO_x for the 30 successive boiler operating days, except for data obtained during startup, shutdown and malfunction.
 - (9) *The Permittee* shall determine compliance with the Hg limit in §60.45Da according to the following procedures:
 - (i) §60.50Da(h)(1) The initial performance test shall be commenced by the applicable date specified in §60.8(a). The required continuous monitoring systems must be certified prior to commencing the test. The performance test consists of collecting hourly Hg emission data (lb/MWh) with the continuous monitoring systems for 12 successive months of unit operation (excluding hours of unit startup, shutdown and malfunction). The average Hg emission rate is calculated for each month, and then the weighted, 12-month average Hg emission rate is calculated according to paragraph (h)(2) or (h)(3) of this section, as applicable. If, for any month in the initial performance test, the minimum data capture requirement in §60.49Da(p)(4)(i) is not met, the owner or operator shall report a substitute Hg emission rate for that month, as follows. For the first such month, the substitute monthly Hg emission rate shall be the arithmetic average of all valid hourly Hg emission rates recorded to date. For any subsequent month(s) with insufficient data capture, the substitute monthly Hg emission rate shall be the highest valid hourly Hg emission rate recorded to date. When the 12-month average Hg emission rate for the initial performance test is calculated, for each month in which there was insufficient data capture, the substitute monthly Hg emission rate shall be weighted according to the number of unit operating hours in that month. Following the initial performance test, the owner or operator shall demonstrate compliance by calculating the weighted average of all monthly Hg emission rates (in lb/MWh) for each 12 successive calendar months, excluding data obtained during startup, shutdown, or malfunction.

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Section V. Specific Operating Conditions (continued)

- A. Emission Unit #S2.001 and S2.002 Two Pulverized Coal Fired Utility Boilers (continued)
 - 4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

- NSPS Subpart Da Compliance/Performance Testing (continued)
 - (9) The Permittee shall determine compliance with the Hg limit in §60.45Da according to the following procedures: (continued)
 - (ii) §60.50Da(h)(2) Follow the procedures below to determine the Hg 12-month rolling average when using a certified CEMS.
 - (1) §60.50Da(h)(2)(i) Calculate the total mass of Hg emissions over a month (M), in pounds (lb), using either equation in A.4.b.(9)(ii)(1)(A) or (B) of this section, in conjunction with the equation in A.4.b.(9)(ii)(1)(C) of this section.
 - (A) §60.50Da(h)(2)(i)(A) If the Hg CEMS measures Hg concentration on a wet basis, use the equation below to calculate the Hg mass emissions for each valid hour:

$$E_h = K * C_h * Q_h * t_h$$

Where: $E_h = Hg$ mass emissions for the hour, (lb)

K = Units conversion constant, 6.24×10^{-11} lb-scm/µgm-scf

 C_h = Hourly Hg concentration, wet basis, (µgm/scm)

 Q_h = Hourly stack gas volumetric flow rate, (scfh)

 $\mathbf{t_h}$ = Unit operating time, *i.e.*, the fraction of the hour for which the unit operated. For example, $t_h = 0.50$ for a half-hour of unit operation and 1.00 for a full hour of operation.

(B) §60.50Da(h)(2)(i)(B) If the Hg CEMS measures Hg concentration on a dry basis, use the equation below to calculate the Hg mass emissions for each valid hour:

$$E_h = K * C_h * Q_h * t_h * (1 - B_{ws})$$

Where: $E_h = Hg$ mass emissions for the hour, (lb)

K = Units conversion constant, 6.24×10^{-11} lb-scm/µgm-scf

 C_h = Hourly Hg concentration, dry basis, (µgm/dscm)

 Q_h = Hourly stack gas volumetric flow rate, (scfh)

 t_h = Unit operating time, *i.e.*, the fraction of the hour for which the unit operated

 \mathbf{B}_{ws} = Stack gas moisture content, expressed as a decimal fraction (e.g., for 8 percent H₂O,

 $B_{ws} = 0.08$)

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 and S2.002 - Two Pulverized Coal Fired Utility Boilers (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

- b. NSPS Subpart Da Compliance/Performance Testing (continued)
 - (9) *The Permittee* shall determine compliance with the Hg limit in §60.45Da according to the following procedures: (continued)
 - (ii) §60.50Da(h)(2) Follow the procedures below to determine the Hg 12-month rolling average. (continued)
 - (1) §60.50Da(h)(2)(i) Calculate the total mass of Hg emissions over a month (M), in pounds (lb), using either equation in A.4.b.(9)(ii)(1)(A) or (B) of this section, in conjunction with the equation in A.4.b.(9)(ii)(1)(C) of this section. (continued)
 - (C) §60.50Da(h)(2)(i)(C) Use the equation below, to calculate M, the total mass of Hg emitted for the month, by summing the hourly masses derived in equations A.4.b.(9)(ii)(1)(A) or (B) of this section (as applicable):

$$M = \sum_{h=1}^{n} E_h$$

Where: M = Total Hg mass emissions for the month, (lb)

 $\mathbf{E_h} = \mathrm{Hg}$ mass emissions for hour "h", from A.4.b.(9)(ii)(1)(A) or (B)of this section, (lb) $\mathbf{n} = \mathrm{The}$ number of unit operating hours in the month with valid CEM and electrical output data, excluding hours of unit startup, shutdown and malfunction

(2) §60.50Da(h)(2)(ii) Calculate the monthly Hg emission rate on an output basis (lb/MWh) using the equation below.

$$ER = \frac{M}{P}$$

Where: $\mathbf{ER} = \mathbf{Monthly Hg emission rate}$, (lb/MWh)

M = Total mass of Hg emissions for the month, from above, (lb)

P = Total electrical output for the month, for the hours used to calculate M, (MWh)

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 and S2.002 - Two Pulverized Coal Fired Utility Boilers (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

- NSPS Subpart Da Compliance/Performance Testing (continued)
 - (9) The Permittee shall determine compliance with the Hg limit in §60.45Da according to the following procedures: (continued)
 - (ii) §60.50Da(h)(2) Follow the procedures below to determine the Hg 12-month rolling average. (continued)
 - (3) §60.50Da(h)(2)(iii) Until 12 monthly Hg emission rates have been accumulated, calculate and report only the monthly averages. Then, for each subsequent calendar month, use the equation below to calculate the 12 month rolling average as a weighted average of the Hg emission rate for the current month and the Hg emission rates for the previous 11 months, with one exception. Calendar months in which the unit does not operate (zero unit operating hours) shall not be included in the 12-month rolling average.

$$E_{avg} = \frac{\sum_{i=1}^{12} (ER)_i * n_i}{\sum_{i=1}^{12} n_i}$$

Where: \mathbf{E}_{avg} = Weighted 12-month rolling average Hg emission rate, (lb/MWh)

(ER)_i = Monthly Hg emission rate, for month "i", (lb/MWh)

n = The number of unit operating hours in month "i" with valid CEM and electrical output data,

- excluding hours of unit startup, shutdown, and malfunction
- (iii) §60.50Da(h)(3) If a sorbent trap monitoring system is used in lieu of a Hg CEMS, as described in §75.15 of this chapter and in appendix K to Part 75 of this chapter, calculate the monthly Hg emission rates using the equations in A.4.b.(9)(ii)(1)(B) through A.4.b.(9)(ii)(2) of this section, except that for a particular pair of sorbent traps, C_h in the equation in A.4.b.(9)(ii)(1)(B) shall be the flow-proportional average Hg concentration measured over the data collection period.
- (iv) §60.50Da(i) Daily calibration drift (CD) tests and quarterly accuracy determinations shall be performed for Hg CEMS in accordance with Procedure 1 of Appendix F to this Part. For the CD assessments, you may either use elemental mercury or mercuric chloride (Hg° or HgCl₂) standards. The four quarterly accuracy determinations shall consist of one relative accuracy test audit (RATA) and three measurement error (ME) tests using HgCl₂ standards, as described in section 8.3 of Performance Specification 12-A in Appendix B to this Part (note: Hg° standards may be used if the Hg monitor does not have a converter). Alternatively, the owner or operator may implement the applicable daily, weekly, quarterly and annual quality assurance (QA) requirements for Hg CEMS in Appendix B to Part 75 of this chapter, in lieu of the QA procedures in Appendices B and F to this Part. Annual RATA of sorbent trap monitoring systems shall be performed in accordance with Appendices A and B to Part 75 of this chapter, and all other quality assurance requirements specified in Appendix K to Part 75 of this chapter shall be met for sorbent trap monitoring systems.

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Section V. Specific Operating Conditions (continued)

- A. Emission Unit #S2.001 and S2.002 Two Pulverized Coal Fired Utility Boilers (continued)
 - 4. NAC 445B.3405
 - Compliance, Monitoring, Recordkeeping and Reporting
 - b. NSPS Subpart Da Compliance/Performance Testing (continued)
 - (10) §60.48Da(1) *The Permittee* shall calculate the Hg emission rate (lb/MWh) for each calendar month of the year, using hourly Hg concentrations measured according to the provisions of §60.49Da(p) in conjunction with hourly stack gas volumetric flow rates measured according to the provisions of §60.49Da(l) or (m), and hourly gross electrical outputs, determined according to the provisions in §60.49Da(k). Compliance with the applicable standard under §60.49Da is determined on a 12-month rolling average basis.
 - (11) *The Permittee* shall determine compliance with the opacity standard in 40 CFR §60.42Da(b) via continuous opacity monitoring in accordance with A.4.c.(15) and (16) of this section.

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 and S2.002 - Two Pulverized Coal Fired Utility Boilers (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

c. Monitoring

The Permittee, upon startup of S2.001 and S2.002, will:

- (1) Install, calibrate, operate and maintain mass and volume measurement devices to continuously measure the amount of fuel combusted in **S2.001** and **S2.002**. The mass and volume measurement devices must be installed at appropriate locations in the fuel delivery system to accurately and continuously measure the following listed fuels combusted in **S2.001** and **S2.002**:
 - (i) Coal (in tons)
 - (ii) Distillate Fuel (in gallons)
- (2) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the quantities of fuel as measured by the fuel mass and volume measurement devices required in A.4.c.(1) of this section. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications.
- (3) Perform coal sampling of the coal prior to it entering the boiler. Sampling shall be conducted for moisture, ash, sulfur content and gross calorific value. Coal moisture, ash, sulfur content and gross calorific value will be recorded on 24-hour and 30-day rolling averaging periods. A coal analysis shall be performed daily and the results of these analyses shall be retained for at least two years following the date of the measurement. All sample collection, sample preparation, and analyses performed or caused to be performed shall be conducted according to the methods specified in A.4.c.(4) of this section and in accordance with the coal sampling and analysis plan prepared by EEC and approved by the BAPC under A.4.c.(4) of this section.
- (4) Perform coal sampling as required in A.4.c.(3) of this section according to Section 12.5.3.2.2 in Method 19 in Appendix A to Part 60 and the appropriate ASTM method. The appropriate ASTM methods will be used to determine the coal moisture, ash and sulfur contents. At least 90 days prior to startup of **S2.001 and S2.002**, *the Permittee* shall submit a coal sampling and analysis plan to the Nevada Bureau of Air Pollution Control (BAPC), detailing the procedures and equipment that will be used to obtain samples and analyze the coal, including the appropriate ASTM test methods that will be used for each parameter. The BAPC will review the coal sampling and analysis plan and approve the plan or request additional information within 30 days of receipt of the plan.

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 and S2.002 - Two Pulverized Coal Fired Utility Boilers (continued)

4. NAC 445B.3405

- c. Monitoring (continued)
 - (5) Install, calibrate, operate and maintain a SO₂ continuous emissions monitor system (CEMS) (consisting of a SO₂ pollutant concentration monitor in conjunction with the flow monitoring device required in A.4.c.(22) of this section) to continuously measure the concentration of SO₂ (in ppm), percent reduction and SO₂ emission rate (in lb/hr, lb/MMBtu and lb/MWh) from S2.001 and S2.002. The CEMS will be installed at an appropriate location in the exhaust stack of S2.001 and S2.002 to accurately and continuously measure the SO₂ concentrations in S2.001 and S2.002 in accordance with the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da(b), 40 CFR Part 60, Appendix B, Performance Specification 2, 40 CFR Part 75, Part 75.11, 40 CFR Part 75 Subpart B; and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.
 - (6) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the SO₂ concentration (in ppm), SO₂ percent reduction (including percent reduction as measured in accordance with §60.49Da(b), as applicable, and determined in accordance with A.4.c.(6) of this section) and SO₂ emission rate (in lb/hr, lb/MMBtu and lb/MWh), as measured by the CEMS required in A.4.c.(5) of this section, on a 1-hour, 3-hour, 24-hour and 30-day periods. Percent SO₂ reduction will be determined on a rolling 30-day averaging period. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da, 40 CFR Part 60, Appendix B, Performance Specifications, 40 CFR Part 75, Part 75.11, 40 CFR Part 75 Subpart B; and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.
 - (i) §60.49Da(b)(4): If the owner or operator has installed and certified a SO₂ continuous emissions monitoring system (CEMS) according to the requirements of §75.20(c)(1) of this chapter and appendix A to part 75 of this chapter, and is continuing to meet the ongoing quality assurance requirements of §75.21 of this chapter and appendix B to part 75 of this chapter, that CEMS may be used to meet the requirements of this section, provided that:
 - (1) A CO₂or O₂continuous monitoring system is installed, calibrated, maintained and operated at the same location, according to paragraph (d) of this section; and
 - (2) For sources subject to an SO₂ emission limit in lb/MMBtu under §60.43Da:
 - (A) When relative accuracy testing is conducted, SO₂ concentration data and CO₂ (or O₂) data are collected simultaneously; and
 - (B) In addition to meeting the applicable SO₂ and CO₂(or O₂) relative accuracy specifications in Figure 2 of appendix B to part 75 of this chapter, the relative accuracy (RA) standard in section 13.2 of Performance Specification 2 in appendix B to this part is met when the RA is calculated on a lb/MMBtu basis; and
 - (3) The reporting requirements of \$60.51Da are met. The SO_2 and CO_2 (or O_2) data reported to meet the requirements of \$60.51Da shall not include substitute data values derived from the missing data procedures in subpart D of part 75 of this chapter, nor shall the SO_2 data have been bias adjusted according to the procedures of part 75 of this chapter.
 - (7) Divide the results of the 1-hour average for SO_2 emissions (in lb/hr), recorded in A.4.c.(6) of this section, by 2 to obtain the average Sulfur emissions in lb/hour.

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 and S2.002 - Two Pulverized Coal Fired Utility Boilers (continued)

4. NAC 445B.3405

- c. Monitoring (continued)
 - (8) Install, calibrate, operate and maintain a NO_x continuous emissions monitor system (CEMS) (consisting of a NO_x pollutant concentration monitor in conjunction with the flow monitoring device required in A.4.c.(22) of this section) to continuously measure the concentration of NO_x (in ppm) and NO_x emissions rate (in lb/MMBtu and lb/MWh) from S2.001 and S2.002. The CEMS will be installed at an appropriate location in the exhaust stack of S2.001 and S2.002 to accurately and continuously measure the NO_x concentration in S2.001 and S2.002 in accordance with the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da(c), 40 CFR Part 60, Appendix B, Performance Specification 2, 40 CFR Part 75, Part 75.11, 40 CFR Part 75 Subpart B; and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.
 - (9) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the NO_x concentration (in ppm) and NO_x emissions rate (in lb/MMBtu and lb/MWh), as measured by the CEMS required in A.4.c.(8) of this section, on a 24-hour, 30-day and 12-month rolling period. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60, Appendix B, Performance Specification 2, 40 CFR Part 75, Part 75.11, 40 CFR Part 75 Subpart B; and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.
 - (i) §60.49Da(c)(2): If the owner or operator has installed a NO_X emission rate CEMS to meet the requirements of part 75 of this chapter and is continuing to meet the ongoing requirements of part 75 of this chapter, that CEMS may be used to meet the requirements of this section, except that the owner or operator shall also meet the requirements of §60.51Da. Data reported to meet the requirements of §60.51Da shall not include data substituted using the missing data procedures in subpart D of part 75 of this chapter, nor shall the data have been bias adjusted according to the procedures of part 75 of this chapter. The procedures established in 40 CFR Part 60.49Da(i) shall be used to conduct monitoring system performance evaluations.
 - (10) Install, calibrate, operate and maintain a continuous monitoring system for measuring the oxygen or carbon dioxide content of the flue gases at each location where sulfur dioxide or nitrogen oxides emissions are monitored. (40 CFR Part 60.49Da(d))
 - (11) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the oxygen or carbon dioxide content of the flue gases at each location where sulfur dioxide or nitrogen oxides emissions are monitored (40 CFR Part 60.49Da(d)). The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267.
 - (i) <u>60.49Da(d)</u>: The owner or operator of an affected facility shall install, calibrate, maintain, and operate a CEMS, and record the output of the system, for measuring the O₂ or carbon dioxide (CO₂) content of the flue gases at each location where SO₂ or NO_X emissions are monitored. For affected facilities subject to a lb/MMBtu SO₂ emission limit under §60.43Da, if the owner or operator has installed and certified a CO₂ or O₂monitoring system according to §75.20(c) of this chapter and Appendix A to part 75 of this chapter and the monitoring system continues to meet the applicable quality-assurance provisions of §75.21 of this chapter and appendix B to part 75 of this chapter, that CEMS may be used together with the part 75 SO₂ concentration monitoring system described in paragraph (b) of this section, to determine the SO₂ emission rate in lb/MMBtu. SO₂ data used to meet the requirements of §60.51Da shall not include substitute data values derived from the missing data procedures in subpart D of part 75 of this chapter, nor shall the data have been bias adjusted according to the procedures of part 75 of this chapter.

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 and S2.002 - Two Pulverized Coal Fired Utility Boilers (continued)

4. NAC 445B.3405

- c. Monitoring (continued)
 - (12) Operate the continuous monitoring systems for NO_x, SO₂ and oxygen or carbon dioxide and record data during all periods of operation of the affected facility including periods of startup, shutdown, malfunction or emergency conditions, except for continuous monitoring system breakdowns, repairs, calibration checks and zero and span adjustments. (40 CFR Part 60.49Da(e))
 - (13) Obtain emission data from the continuous emission monitoring systems for NO_x, SO₂ and oxygen or carbon dioxide for at least 90 percent of all operating hours for each 30 successive boiler operating days. If this minimum data requirement cannot be met with a continuous monitoring system, the owner or operator shall supplement emission data with other monitoring systems approved by the Administrator or the reference methods and procedures as described in paragraph §60.49Da(h). (40 CFR Part 60.49Da(f)(2))
 - (14) Use methods and procedures in §60.49Da(i) to conduct monitoring system performance evaluations under §60.13(c) and calibration checks under §60.13(d) for the continuous emission monitoring systems for NO_x, SO₂ and oxygen or carbon dioxide. Acceptable alternative methods and procedures are given in §60.49Da(j). (40 CFR Part 60.49Da(i))
 - (15) Install, calibrate, operate and maintain a continuous opacity monitoring system to continuously measure and record the opacity discharged from **S2.001** and **S2.002**. The continuous opacity monitoring system will be installed at an appropriate location in the discharge stack of **S2.001** and **S2.002** to accurately and continuously measure the opacity of **S2.001** and **S2.002** in accordance with the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da(a), 40 CFR Part 60, Appendix B, Performance Specification 1, and 40 CFR Part 75.10. If opacity interference due to water droplets exists in the stack, the opacity is monitored upstream of the interference.
 - (16) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the opacity (in percent opacity) as measured by the continuous opacity monitoring system required in A.4.c.(15) of this section on a 6-minute average period. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da(a), 40 CFR Part 60, Appendix B, Performance Specification 1, 40 CFR Part 75.10 and 40 CFR Part 75.14.
 - (17) Install, calibrate, operate and maintain a CO continuous emissions monitor system (CEMS) (consisting of a CO pollutant concentration monitor in conjunction with the flow monitoring device required in A.4.c.(22) of this section) to continuously measure the concentration of CO (in ppm) and CO emissions rate (in lb/hr and lb/MMBtu) from **S2.001** and **S2.002**, on a rolling 24-hour averaging period. The CEMS will be installed at an appropriate location in the exhaust stack of **S2.001** and **S2.002** to accurately and continuously measure the CO concentration in **S2.001** and **S2.002** in accordance with the requirements prescribed in NAC 445B.256 to NAC 445B.267 and 40 CFR Part 60, Appendix B, Performance Specification 4 and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.

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Issued to: SIERRA PACIFIC RESOURCES COMPANY, ELY ENERGY CENTER, as Permittee

Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 and S2.002 - Two Pulverized Coal Fired Utility Boilers (continued)

4. NAC 445B.3405

- c. Monitoring (continued)
 - (18) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the CO concentration (in ppm) and CO emissions rate (in lb/hr and lb/MMBtu), as measured by the CEMS required in A.4.c.(17) of this section. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267 and 40 CFR Part 60, Appendix B, Performance Specification 4 and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.
 - (19) The owner or operator of an affected facility demonstrating compliance with an Hg limit in §60.45Da shall install and operate a CEMS to measure and record the concentration of Hg in the exhaust gases from each stack according to the requirements 40 CFR Part 60.49Da(p)(1) through (p)(3). Alternatively, for an affected facility that is also subject to the requirements of subpart I of part 75 of this chapter, the owner or operator may install, certify, maintain, operate and quality-assure the data from a Hg CEMS according to §75.10 of this chapter and appendices A and B to part 75 of this chapter, in lieu of following the procedures 40 CFR Part 60.49Da(p)(1) through (p)(3). The CEMS will be installed at an appropriate location in the exhaust stack of \$2.001 and \$2.002 to accurately and continuously measure the Hg concentration in \$2.001 and \$2.002 in accordance with the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da(p) and 40 CFR Part 60, Appendix B, Performance Specification 12A and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F. Hg CEMS data collection must conform to 40 CFR Part 60.49Da(p)(4)(i) through (iv).
 - (20) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the Hg concentration (in ppm) and Hg emissions rate (in lb/MWh), as measured by the CEMS required in A.4.c.(19) of this section. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267 and 40 CFR Part 60, Appendix B, Performance Specification 12A and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.
 - (21) The owner or operator of an affected facility with electricity generation shall install, calibrate, maintain and operate a wattmeter; measure gross electrical output in megawatt-hour on a continuous basis; and record the output of the monitor. (40 CFR § 60.49Da(k)).
 - (22) Install, certify, operate, and maintain a continuous flow monitoring system meeting the requirements of Performance Specification 6 of appendix B of this part and the CD assessment, RATA and reporting provisions of procedure 1 of appendix F of this part, and record the output of the system, for measuring the volumetric flow rate of exhaust gases discharged to the atmosphere; or
 - (i) 60.49Da(m): Alternatively, data from a continuous flow monitoring system certified according to the requirements of §75.20(c) of this chapter and appendix A to part 75 of this chapter, and continuing to meet the applicable quality control and quality assurance requirements of §75.21 of this chapter and appendix B to part 75 of this chapter, may be used. Flow rate data reported to meet the requirements of §60.51Da shall not include substitute data values derived from the missing data procedures in subpart D of part 75 of this chapter, nor shall the data have been bias adjusted according to the procedures of part 75 of this chapter.

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 and S2.002 - Two Pulverized Coal Fired Utility Boilers (continued)

4. NAC 445B.3405

- c. Monitoring (continued)
 - (23) 60.49Da(w)(1): Except as provided for under paragraphs (w)(2), (w)(3), and (w)(4) of this section, the SO₂, NO_x, CO₂, and O₂ CEMS required under paragraphs (b) through (d) of this section shall be installed, certified, and operated in accordance with the applicable procedures in Performance Specification 2 or 3 in appendix B to this part or according to the procedures in appendices A and B to part 75 of this chapter. Daily calibration drift assessments and quarterly accuracy determinations shall be done in accordance with Procedure 1 in appendix F to this part, and a data assessment report (DAR), prepared according to section 7 of Procedure 1 in appendix F to this part, shall be submitted with each compliance report required under §60.51Da., the owner or operator may elect to implement the following alternative data accuracy assessment procedures:
 - (i) 60.49Da(w)(2): As an alternative to meeting the requirements of paragraph (w)(1) of this section, an owner or operator may elect to may elect to implement the following alternative data accuracy assessment procedures. For all required CO₂ and O₂ CEMS and for SO₂ and NO_x CEMS with span values greater than 100 ppm, the daily calibration error test and calibration adjustment procedures described in sections 2.1.1 and 2.1.3 of appendix B to part 75 of this chapter may be followed instead of the CD assessment procedures in Procedure 1, section 4.1 of appendix F of this part. If this option is selected, the data validation and out-of-control provisions in sections 2.1.4 and 2.1.5 of appendix B to part 75 of this chapter shall be followed instead of the excessive CD and out-of-control criteria in Procedure 1, section 4.3 of appendix F to this part. For the purposes of data validation under this subpart, the excessive CD and out-of-control criteria in Procedure 1, section 4.3 of appendix F to this part shall apply to SO₂ and NO_x span values less than 100 ppm;
 - (ii) <u>60.49Da(w)(3)</u>: As an alternative to meeting the requirements of paragraph (w)(1) of this section, an owner or operator may elect to may elect to implement the following alternative data accuracy assessment procedures. For all required CO₂ and O₂ CEMS and for SO₂ and NO_xCEMS with span values greater than 30 ppm, quarterly linearity checks may be performed in accordance with section 2.2.1 of appendix B to part 75 of this chapter, instead of performing the cylinder gas audits (CGAs) described in Procedure 1, section 5.1.2 of appendix F to this part. If this option is selected: The frequency of the linearity checks shall be as specified in section 2.2.1 of appendix B to part 75 of this chapter; the applicable linearity specifications in section 3.2 of appendix A to part 75 of this chapter shall be met; the data validation and out-of-control criteria in section 2.2.3 of appendix B to part 75 of this chapter shall be followed instead of the excessive audit inaccuracy and out-of-control criteria in Procedure 1, section 5.2 of appendix F to this part; and the grace period provisions in section 2.2.4 of appendix B to part 75 of this chapter shall apply. For the purposes of data validation under this subpart, the cylinder gas audits described in Procedure 1, section 5.1.2 of appendix F to this part shall be performed for SO₂ and NO_x span values less than or equal to 30 ppm;

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 and S2.002 - Two Pulverized Coal Fired Utility Boilers (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

c. Monitoring (continued)

(23) <u>60.49Da(w)</u> (continued):

- (iii) 60.49Da(w)(4): As an alternative to meeting the requirements of paragraph (w)(1) of this section, an owner or operator may elect to may elect to implement the following alternative data accuracy assessment procedures. For SO₂, CO₂, and O₂ CEMS and for NO_x CEMS, RATAs may be performed in accordance with section 2.3 of appendix B to part 75 of this chapter instead of following the procedures described in Procedure 1, section 5.1.1 of appendix F to this part. If this option is selected: The frequency of each RATA shall be as specified in section 2.3.1 of appendix B to part 75 of this chapter; the applicable relative accuracy specifications shown in Figure 2 in appendix B to part 75 of this chapter shall be met; the data validation and out-of-control criteria in section 2.3.2 of appendix B to part 75 of this chapter shall be followed instead of the excessive audit inaccuracy and out-of-control criteria in Procedure 1, section 5.2 of appendix F to this part; and the grace period provisions in section 2.3.3 of appendix B to part 75 of this chapter shall apply. For the purposes of data validation under this subpart, the relative accuracy specification in section 13.2 of Performance Specification 2 in appendix B to this part shall be met on a lb/MMBtu basis for SO₂ (regardless of the SO₂ emission level during the RATA), and for NO_x when the average NO_x emission rate measured by the reference method during the RATA is less than 0.100 lb/MMBtu;
- (iv) 60.49Da(w)(5): If the owner or operator elects to implement the alternative data assessment procedures described in paragraphs (w)(2) through (w)(4) of this section, each data assessment report shall include a summary of the results of all of the RATAs, linearity checks, CGAs, and calibration error or drift assessments required by paragraphs (w)(2) through (w)(4) of this section.

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Section V. Specific Operating Conditions (continued)

- A. Emission Unit #S2.001 and S2.002 Two Pulverized Coal Fired Utility Boilers (continued)
 - 4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

d. Recordkeeping

The Permittee will maintain contemporaneous logs containing at a minimum, the following recordkeeping for each day, or part of a day that **S2.001** and **S2.002** are operating:

- (1) The total hourly quantity of:
 - i. Coal (in tons) combusted, for each hour of operation based on the data recorded by the CDCS as required in A.4.c.(2) of this section.
 - ii. Distillate fuel (in gallons) combusted, for each hour of operation based on the data recorded by the CDCS as required in A.4.c.(2) of this section.
- (2) Daily hours of operation:
 - i. The total daily hours of operation for the corresponding date.
- (3) The moisture, ash and sulfur content of the coal, as required in A.4.c.(3) of this section. The average heat content of the coal, in Btu/ton, combusted for the corresponding date. The heat content of the coal will be based on the gross calorific value determined in A.4.c.(3) of this section. The average heat content of the distillate fuel will be provided by the supplier.
- (4) The average hourly heat input of the coal and/or distillate fuel in MMBtu per hour. The hourly heat inputs will be calculated from the hourly fuel usage rates recorded in A.4.d.(1) of this section, and the heat content of the fuel as recorded in A.4.d.(3) of this section.

Sample Calculation: (tons-coal/hr)(Btu/ton-coal) = Btu/hr or MMBtu/hr or (gallons of distillate fuel/hr)(Btu/gallons) = Btu/hr or MMBtu/hr

- (5) The hourly emission rate of PM and PM_{10} each:
 - (i) In pounds per MMBtu (lbs/MMBtu). The hourly emission rates will be calculated from the heat content of the fuel determined in A.4.d.(3) of this section, and the emission factor derived in A.4.a.(12) of this section.

Sample Calculation: (tons-coal/Btu)(lb/tons-coal) = lbs-PM/Btu or lbs-PM/MMBtu (tons-coal/Btu)(lb/tons-coal) = lbs-PM₁₀/Btu or lbs-PM₁₀/MMBtu

(ii) In pounds per hour (lbs/hr). The hourly emission rates will be calculated from the hourly tonnage of coal combusted, as determined in A.4.d.(1) of this section, and the emission factor derived in A.4.a.(12) of this section.

Sample Calculation: (tons-coal/hour)(lb/tons-coal) = lbs-PM/hr (tons-coal/hr)(lb/tons-coal) = lbs-PM₁₀/Btu

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Section V. Specific Operating Conditions (continued)

A. Emission Unit #S2.001 and S2.002 - Two Pulverized Coal Fired Utility Boilers (continued)

4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

- d. Recordkeeping (continued)
 - (6) The emission rates of sulfur and SO₂ each, in pounds per hour (lbs/hr) and pounds per million Btu (lbs/MMBtu) measured by the CEMS required in A.4.c.(5) of this section; and the "as fired" fuel monitoring required in A.4.c.(1) of this section, for each averaging period described below:
 - (i) The sulfur emissions in pounds per hour (lbs/hr) for each 1-hour period. Sulfur emissions will be one-half of the SO₂ emissions measured.
 - (ii) The Sulfur and SO₂ emissions in pounds per million Btu (lbs/MMBtu).

The compliance determination procedures established in 40 CFR Part 60.50Da(c) will be used to convert the continuous monitoring data into units of the applicable standards (lb/MMBtu and lb/hr, 3-hour, 24-hour and 30-day rolling average periods and percent reduction).

- (7) The hourly emissions rate of NO_x in pounds per million Btu (lbs/MMBtu) for each 30-day rolling averaging period measured by the CEMS required in A.4.c.(8) of this section. The compliance determination procedures established in 40 CFR Part 60.50Da(d) will be used to convert the continuous monitoring data into units of the applicable standard (e.g., lb/MMBtu, 24-hour, 30-day, annual rolling average periods).
- (8) The recorded opacity (in percent opacity) from the continuous opacity CDCS system required in A.4.c.(16) of this section. The opacity will be determined from reducing all data from the successive 10-second readings and recorded for the following:
 - (i). Each 6-minute average, except for one 6-minute period per hour of up to 27 percent opacity as established in NAC 445B.22017.1(b) and as set forth in 40 CFR Part 60.13(h).
 - (ii). Each 6-minute average, except for one 6-minute period per hour of up to 27 percent opacity as established in 40 CFR Part 60.42Da(b).
- (9) The emissions rate of CO in pounds per million Btu (lbs/MMBtu) and pounds per hour (lbs/hr) recorded by the CDCS required in A.4.c.(18) of this section.
- (10) The emissions rate of Hg in pounds per Megawatt-hour (lbs/MWh) recorded by the CDCS required in A.4.c.(20) of this section. The compliance determination procedures established in 40 CFR Part 60.45Da will be used to convert the continuous monitoring data into units of the applicable standard (e.g., lb/MWh).
- (11) The gross electrical output in megawatt-hour on a continuous basis as required in A.4.c.(21) of this section.
- (12) New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b)) Permittee, upon the issuance date of this permit shall:
 - (i) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

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Section V. Specific Operating Conditions

B. Emission Unit #S2.003 - Ultra Low Sulfur Distillate Fuel-Fired Auxiliary Boiler

UTM: North 4,374.629 km, East 690.010 km (Zone 11)

System 02 - Ultra Low Sulfur Distillate Fuel -Fired Auxiliary Boiler

S2.003 Auxiliary Boiler, Manufacturer TBD, Model # TBD, Serial # TBD, Unit Manufactured TBD.

220 million Btu/hr - Maximum Heat Input Rate

1. NAC 445B.3405

Air Pollution Equipment

- a. Emissions from S2.003 shall be controlled by the following combustion practices. The following control technologies shall be utilized to minimize the formation of NO_x during the combustion process:
 - (1) Low NO_x Burner.
 - (2) Good Combustion Controls

b. Nominal Stack Parameters

Height: 300 ft
Diameter: 5 ft
Stack Temperature: 350 °F
Velocity: 59.06 ft/sec
Volume Flow: 69,208 DSCFM

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Section V. Specific Operating Conditions

- B. Emission Unit #S2.003 Ultra Low Sulfur Distillate Fuel-Fired Auxiliary Boiler (continued)
 - 2. NAC 445B.3405

Emission Limits

- a. On and after the date of startup of **S2.003**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **S2.003**, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of PM (particulate matter) to the atmosphere will not exceed **4.4** pounds per hour, based on a 3-hr averaging period. The discharge of PM₁₀ (particulate matter less than 10 microns in diameter), filterable and condensable, to the atmosphere will not exceed **4.4** pounds per hour, based on a 3-hr averaging period.
 - (2) NAC 445B.2203 The discharge of PM₁₀, filterable and condensable, to the atmosphere will not exceed **0.29** pound per million Btu, based on a 3-hr averaging period.
 - (3) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of PM to the atmosphere will not exceed **0.02** pound per million Btu. The discharge of PM₁₀, filterable and condensable, to the atmosphere will not exceed **0.02** pound per million Btu, based on a 3-hr averaging period.
 - (4) NAC 445B.305 The discharge of SO₂ (sulfur dioxide) to the atmosphere will not exceed **11.0** pound per hour, based on a 3-hour averaging period.
 - (5) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of SO₂ to the atmosphere will not exceed **0.05** pound per million Btu, based on a 3-hour averaging period.
 - (6) NAC 445B.22047(2) The discharge of sulfur to the atmosphere will not exceed **154.0** pounds per hour, based on a 3-hour averaging period.
 - (7) NAC 445B.305 The discharge of NO_x to the atmosphere will not exceed **22.0** pounds per hour, based on a 3-hour averaging period.
 - (8) 40 CFR Part 60.44b(a) Federally Enforceable New Source Performance Standard Requirement On and after the date on which the initial performance test required to be conducted by Sec. 60.8 is completed, no owner or operator subject to the provisions of this section and that combusts only coal, oil or natural gas shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides (expressed as NO₂) in excess of the following emission limits:
 - (i) Natural Gas and Distillate Oil:
 - (1) Low Heat Release Rate: 43 ng/J (0.10 lb/million Btu)
 - (2) High Heat Release Rate: 86 ng/J (0.20 lb/million Btu)
 - (9) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of NO_x (oxides of nitrogen) to the atmosphere will not exceed **0.1** pound per million Btu, based on a 3-hour averaging period.

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Section V. Specific Operating Conditions

- B. Emission Unit #\$2.003 Ultra Low Sulfur Distillate Fuel-Fired Auxiliary Boiler (continued)
 - 2. NAC 445B.3405

Emission Limits

- a. On and after the date of startup of **S2.003**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **S2.003**, the following pollutants in excess of the following specified limits:
 - (10) NAC 445B.305 The discharge of CO to the atmosphere will not exceed **7.92** pounds per hour, based on a 3-hour averaging period.
 - (11) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of CO (carbon monoxide) to the atmosphere will not exceed **0.036** pound per million Btu, based on a 3-hour averaging period.
 - (12) NAC 445B.305 The discharge of VOC (volatile organic compounds) to the atmosphere will not exceed **0.4** pound per hour, based on a 3-hour averaging period.
 - (13) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of VOC to the atmosphere will not exceed **0.0018** pound per million Btu, based on a 3-hour averaging period.
 - (14) NAC 445B.22017 The opacity from **S2.003** will not equal or exceed 20%. The opacity must be determined as set forth in 445B.22017.1(a) or (b).

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Section V. Specific Operating Conditions

- B. Emission Unit #S2.003 Ultra Low Sulfur Distillate Fuel-Fired Auxiliary Boiler (continued)
 - 2. NAC 445B.3405

Emission Limits (continued)

- b. Federally Enforceable National Emission Standards for Hazardous Air Pollutants Requirements.
 - (1) 40 CFR Part 63.52(b)(1) When one or more sources in a category or subcategory subject to the requirements of 40 CFR Part 63.52 are installed at a major source, or result in the source becoming a major source due to the installation, and the installation does not invoke section 112(g) of the Clean Air Act requirements, *The Permittee* must submit an application meeting the requirements of 40 CFR Part 63.53(a) within 30 days of startup of the source.
- 3. NAC 445B.3405

Operating Parameters

- a. **BACT Requirement S2.003** will only combust distillate fuel with a sulfur content not to exceed **0.0015**% sulfur, by weight.
- b. **S2.003** will operate 8760 hours per year.
- c. The maximum operating heat input rate for \$2.003 will not exceed 220 million Btu per any one-hour period.
- d. The maximum allowable distillate fuel consumption rate for \$2.003 will not exceed 1571.5 gallons per hour.
- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Monitoring and Record keeping

- a. The Permittee, upon issuance of this operating permit will:
 - (1) Monitor and record the total consumption of distillate fuel for **S2.003** on a daily basis, for each day or part of a day that **S2.003** is operating.
 - (2) Monitor and record the hours of operation for **S2.003** on a daily basis, for each day or part of a day that **S2.003** is operating.
 - (3) Conduct and record a visible emission inspection on the exhaust stack of **S2.003**, for each day, or part of a day that **S2.003** is operating; record the time of the survey and indicate whether any visible emission was observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
 - (4) The required monitoring established in (1) through (3) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.003** is operating:
 - (i) The calendar date of any required monitoring.
 - (ii) The total daily hours of operation for the corresponding date.
 - (iii) The total daily fuel consumption rate of distillate fuel, in gallons, for the corresponding date.
 - (iv) The corresponding average hourly fuel consumption rate of distillate fuel, in gallons per hour. The average hourly fuel consumption rate will be determined from the daily fuel consumption rate and the total daily hours of operation recorded in (ii) and (iii) above.
 - (v) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.

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- B. Emission Unit #S2.003 Ultra Low Sulfur Distillate Fuel-Fired Auxiliary Boiler (continued)
 - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
 - b. <u>Compliance/Performance Testing</u>
 Within 100.0 operating hours of the notification of initial startup of S2.003, as required in Section II.A.3, the Permittee shall:
 - (1) Conduct and record a Method 5 performance test for PM on the exhaust stack of **S2.003** consisting of three valid runs. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5, and include the back-half catch.
 - (2) Conduct and record a Method 201A and 202 performance test for PM₁₀ on the exhaust stack of **S2.003** consisting of three valid runs. The Method 201A and 202 emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201A and 202. The Method 201A and 202 emissions tests may be replaced by the Method 5 performance test required in B.4.b.(1) above. All particulate captured in the Method 5 test will be considered PM₁₀ for compliance demonstration purposes. The sample time for each test run shall be at least 60 minutes. The sample volume for each test run shall be at least 60 dry standard cubic feet per minute (dscfm).
 - (3) Conduct and record a Method 7E performance test for NO_x on the exhaust stack of **S2.003** consisting of three valid runs. The Method 7E emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 7E.
 - (4) Conduct and record a Method 10 performance test for CO on the exhaust stack of **S2.003** consisting of three valid runs. The Method 10 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 10.
 - (5) Conduct and record a Method 25 performance test for VOC on the exhaust stack of **S2.003** consisting of three valid runs. The Method 25 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 25.
 - (6) Conduct and record a Method 6 performance test for SO₂ on the exhaust stack of **S2.003** consisting of three valid runs. The Method 6 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 6. To determine the sulfur emission rate, *the Permittee* shall divide the SO₂ emission rate by 2.
 - (8) During one of the three test runs required in B.4.b.(1) or (2) of this section, conduct and record a Method 9 visual opacity observation of the discharge from the exhaust stack of **S2.003**. The Method 9 opacity test must be conducted in accordance with the visible emissions evaluation procedures contained in 40 CFR Part 60, Appendix A, Method 9. A certified visible emissions reader must conduct the visible emissions evaluations for a period of at least 6 minutes. The opacity readings must be averaged such that compliance with a 6-minute average is determined.

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CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

Issued to: SIERRA PACIFIC RESOURCES COMPANY, ELY ENERGY CENTER, as Permittee

- B. Emission Unit #S2.003 Ultra Low Sulfur Distillate Fuel-Fired Auxiliary Boiler (continued)
 - 4. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Compliance, Monitoring, Recordkeeping and Reporting (continued)
 - b. Compliance/Performance Testing (continued)
 - (9) The performance tests will be conducted at the maximum operating heat input rate limit established in B.3.c of this section for each pollutant required to be tested, unless otherwise approved pursuant to NAC 445B.252.2 & 3. *The Permittee* shall make available to the director such records as may be necessary to determine the conditions of the performance test. Operations during periods of startup, shutdown and malfunction must not constitute representative conditions of a performance test unless otherwise specified in the applicable standard (NAC 445B.252.3).
 - (10) *The Permittee* shall give notice to the director 30 days before the performance test to allow the director to have an observer present. A written testing procedure for the performance test must be submitted to the director at least 30 days before the test of performance to allow the director to review the proposed testing procedures (NAC 445B.252.4). Alternatives to the reference methods and procedures provided in B.4.b. of this section may be utilized to the extent that they are applicable to **S2.003**, and must be identified in the testing procedures as alternative methods.
 - (11) During each performance test required in B.4.b.(1) through (7) of this section, record the quantity (in gallons) of distillate fuel combusted during each test run, the heat content value of the distillate fuel combusted during each test run (in Btu/gallon) and include these data in the test results submitted.
 - (12) Within 60 days after completing the performance tests and opacity observations contained in B.4.b. of this section, *the Permittee* shall furnish the director a written report of the results of the performance tests, the opacity observations and the resultant emissions factors. All information and analytical results of testing and sampling must be certified as to the truth and accuracy and as to their compliance with NAC 445B.001 to 445B.3689 (NAC 445B.252.8).

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- B. Emission Unit #S2.003 Ultra Low Sulfur Distillate Fuel-Fired Auxiliary Boiler (continued)
 - 4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*Compliance, Monitoring, Recordkeeping and Reporting (continued)
 - a. **NSPS Subpart Db Compliance** Since **S2.003** will combust only distillate fuel that contains less than 0.3% sulfur by weight, **S2.003** is not subject to the SO₂, PM, or opacity limits in 40 CFR Part 60, Subpart Db (per 40 CFR §60.42b(k)(1), §60.43b(h)(5), and 71 FR 9868). However, **S2.003** is subject to the NSPS Subpart Db compliance requirements listed below:
 - (1) §60.46b(e) To determine compliance with the emission limits for NO_X required under §60.44b, *the Permittee* shall conduct the performance test as required under §60.8 using the continuous system for monitoring NO_X under §60.48(b).
 - (i) For the initial compliance test, NO_X from the steam generating unit are monitored for 30 successive steam generating unit operating days and the 30-day average emission rate is used to determine compliance with the NO_X emission standards under §60.44b. The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period.
 - (2) §60.48b(b) The Permittee shall comply with B.4.a.(2)(i):
 - (i) Install, calibrate, maintain, and operate CEMS for measuring NO_X and O_2 (or CO_2) emissions discharged to the atmosphere, and shall record the output of the system.
 - (3) §60.48b(c) The CEMS required under B.4.a.(2) shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.
 - (4) $\underline{\$60.48b(d)}$ The 1-hour average NO_X emission rates measured by the continuous NO_X monitor required by B.4.a.(2) and required under \$60.13(h) shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates under B.2.a. The 1-hour averages shall be calculated using the data points required under \$60.13(h)(2).
 - (5) §60.48b(e) The procedures under §60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring systems.
 - (i) The span value for NO_X is determined using the procedures established under $\S60.48b(e)(2)$:
 - (ii) All span values computed under §60.48b(e)(2)(i) for combusting mixtures of regulated fuels are rounded to the nearest 500 ppm. Span values computed under §60.48b(e)(2)(ii) of this section shall be rounded off according to section 2.1.2 in appendix A to part 75 of this chapter.
 - (6) §60.48b(f) When NO_X emission data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7 of appendix A of this part, Method 7A of appendix A of this part, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.

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- B. Emission Unit #S2.003 Ultra Low Sulfur Distillate Fuel-Fired Auxiliary Boiler (continued)
 - NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Compliance, Monitoring, Recordkeeping and Reporting (continued)</u>
 - a. (continued):
 - (7) §60.49b(a) *The Permittee* shall submit notification of the date of initial startup, as provided by §60.7. This notification shall include:
 - (i) The design heat input capacity of the affected facility and identification of the fuels to be combusted in the affected facility.
 - (8) §60.49b(b) *The Permittee* shall submit to the Administrator the performance test data from the initial performance test and the performance evaluation of the CEMS using the applicable performance specifications in appendix B of this part
 - (9) §60.49b(g) *The Permittee* shall maintain records of the following information for each steam generating unit operating day:
 - (i) Calendar date;
 - (ii) The average hourly NO_X emission rates (expressed as NO₂) (ng/J or lb/MMBtu heat input) measured or predicted;
 - (iii) The 30-day average NO_X emission rates (ng/J or lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;
 - (iv) Identification of the steam generating unit operating days when the calculated 30-day average NO_X emission rates are in excess of the NO_X emissions standards under §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken;
 - (v) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;
 - (vi) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;
 - (vii) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;
 - (viii) Identification of the times when the pollutant concentration exceeded full span of the CEMS;
 - (ix) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and
 - (x) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part.

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- B. Emission Unit #S2.003 Ultra Low Sulfur Distillate Fuel-Fired Auxiliary Boiler (continued)
 - NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> <u>Compliance, Monitoring, Recordkeeping and Reporting (continued)</u>
 - a. (continued):
 - (10) §60.49b(o) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of 2 years following the date of such record.
 - (11) §60.49b(v) The owner or operator of an affected facility may submit electronic quarterly reports for SO_2 and/or NO_X and/or opacity in lieu of submitting the written reports required under §60.49b(h), (i), (j), (k) or (l) of this section. The format of each quarterly electronic report shall be coordinated with the permitting authority. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this subpart was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the permitting authority to obtain their agreement to submit reports in this alternative format.
 - (12) §60.49b(w) The reporting period for the reports required under this subpart is each 6 month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.
 - (13) *The Permittee* shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction of **S2.003**; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

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Section V. Specific Operating Conditions (continued)

C. Emission Unit S2.004 - Emergency Generator Engine (750 kW)

UTM: North 4,374.628 km, East 690.006 km (Zone 11)

System 03 Emergency Generator Engine (Switchyard Generator)

S2.004 Emergency Diesel Engine Driven Generator (750 kW); 1,013 Brake Horsepower Output

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from \$2.004 shall be controlled via good combustion practices, proper maintenance, and the use of ultra low-sulfur fuel.

b. Nominal Stack Parameters

Height: 20 ft
Diameter: 1.17 ft
Stack Temperature: 990 °F
Velocity: 74.6 ft/sec
Volume Flow: 4,786 DSCFM

2. NAC 445B.3405

Emission Limits

- a. On and after the date of startup of **S2.004**, Permittee will not discharge or cause the discharge into the atmosphere from the stack discharge of **S2.004**, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.3** pound per hour. The discharge of **PM** to the atmosphere will not exceed **0.041** ton per year.
 - (2) NAC 445B.305 The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.3** pound per hour. The discharge of PM_{10} to the atmosphere will not exceed **0.041** ton per year.
 - (3) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of PM_{10} to the atmosphere will not exceed 0.3 pounds per hour.
 - (4) NAC 445B.305 The discharge of SO_2 (sulfur dioxide) to the atmosphere will not exceed **0.004** pound per hour. The discharge of SO_2 to the atmosphere will not exceed **0.0005** ton per year.
 - (5) NAC 445B.305 The discharge of NO_x (nitrogen oxides) to the atmosphere will not exceed 9.3 pounds per hour. The discharge of NO_x to the atmosphere will not exceed 1.2 ton per year.
 - (6) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of NO_x to the atmosphere will not exceed 9.3 pounds per hour.
 - (7) NAC 445B.305 The discharge of **CO** (carbon monoxide) to the atmosphere will not exceed **5.8** pounds per hour. The discharge of **CO** to the atmosphere will not exceed **0.72** ton per year.
 - (8) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **CO** to the atmosphere will not exceed **5.8** pounds per hour.
 - (9) NAC 445B.22017 The opacity from the **S2.004** stack discharge will not equal or exceed 20% in accordance with NAC 445B.22017.

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Section V. Specific Operating Conditions (continued)

C. Emission Unit S2.004 - Emergency Generator Engine (750 kW) (continued)

2. NAC 445B.3405

Emission Limits (continued)

- b. New Source Performance Standards
 - (1) 40 CFR § 60.4205(b) <u>Federally Enforceable New Source Performance Standard Requirement</u> Owners and operators of 2007 model year or later emergency stationary compression ignition (CI) internal combustion engine (ICE) with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new, non-road CI engines in 40 CFR § 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.
 - (i) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new, non-road CI engines for the same model year and maximum engine power in 40 CFR § 89.112 and 40 CFR § 89.113, for all pollutants beginning in model year 2007 apply. (40 CFR § 60.4202(a)(2))
 - (ii) Exhaust emissions from non-road engines to which this subpart is applicable shall not exceed the applicable exhaust emission standards as follows:
 - For engines with a rated power of greater than 560 kW, the following emission standards (in g/kW-hr) apply:
 - (A) Non-methane hydrocarbon (NMHC) + Oxides of Nitrogen (NO_x), combined, shall not exceed 6.4 g/kW-hr;
 - (B) Carbon Monoxide (CO) shall not exceed 3.5 g/kW-hr;
 - (C) Particulate Matter (PM) shall not exceed 0.20 g/kW-hr). (40 CFR §89.112(a))
 - (iii) Exhaust opacity from compression ignition, non-road engines, for which this subpart is applicable, must not exceed:
 - (A) 20 percent during the acceleration mode;
 - (B) 15 percent during the lugging mode; and
 - (C) **50** percent during the peaks in either the acceleration or lugging modes.

As measured and calculated per 40 CFR Part 86, Subpart I. (40 CFR §89.113(a) and (b))

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Section V. Specific Operating Conditions (continued)

C. Emission Unit S2.004 - Emergency Generator Engine (750 kW) (continued)

2. NAC 445B.3405

Emission Limits (continued)

- b. New Source Performance Standards (continued)
 - (2) 40 CFR §60.4207(a) <u>Federally Enforceable New Source Performance Standard Requirement</u> Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR §80.510(a).
 - (i) Beginning June 1, 2007, except as otherwise specifically provided in this subpart, all Non-road diesel fuel is subject to the following per-gallon standards:
 - (A) Sulfur content 500 parts per million (ppm) maximum. (40 CFR §80.510(a)(1))
 - (B) Cetane index or aromatic content minimum cetane index of 40 or maximum aromatic content of 35 volume percent. (40 CFR §80.510(a)(2))
 - (3) 40 CFR §60.4207(b) <u>Federally Enforceable New Source Performance Standard Requirement</u> Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR § 80.510(b) for non-road diesel fuel.
 - (i) Beginning June 1, 2010, except as otherwise specifically provided in this subpart, all Non-road diesel fuel is subject to the following per-gallon standards:
 - (A) Sulfur content 15 (ppm) maximum. (40 CFR §80.510(b)(1))
 - (B) Cetane index or aromatic content minimum cetane index of 40 or maximum aromatic content of 35 volume percent. (40 CFR §80.510(b)(2))

3. NAC 445B.3405

Operating Parameters

- a. **BACT Requirement S2.004** may only combust distillate fuel with a sulfur content not to exceed **0.0015**% sulfur, by weight.
- b. **S2.004** may not combust more than **37.4** gallons of distillate fuel per hour.
- c. **S2.004** may not operate on a routine basis in excess of **250** hours per calendar year. If additional firing is required in case of emergency, *the Permittee* will document the emergency and handle the operation as excess emissions as required by Section III.B.4.
- d. Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. Anyone may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. For owners and operators of emergency engines meeting standards under §60.4205 but not §60.4204, any operation other than emergency operation, and maintenance and testing as permitted in this section, is prohibited.

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Section V. Specific Operating Conditions (continued)

C. Emission Unit S2.004 - Emergency Generator Engine (750 kW) (continued)

4. NAC 445B.3405

Monitoring, Record keeping and Compliance

- a. Upon commencement of operation, the Permittee will:
 - (1) Monitor and record the total daily hours of operation of **S2.004** each day of operation.
 - (2) Monitor and record the total daily fuel consumption for **S2.004** each day of operation.
 - (3) Record average hourly fuel consumption for **S2.004** each day of operation. The average will be determined using the total hours of operation and total daily fuel consumption in C.4.a.(1) and C.4.a.(2) of this section.
 - (4) Conduct and record a Method 9 visible emissions test on the stack discharge of **S2.004** while the Diesel Engine Driven Generator is operating, on an annual basis. The Method 9 visible emissions test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
 - (5) 40 CFR §60.4211(c) <u>Federally Enforceable New Source Performance Standard Requirement</u> **The Permittee** shall comply with the applicable NSPS Subpart IIII emission limits by purchasing an engine certified to the emission standards in D.2.b.(1) of this section. The engine must be installed and configured according to the manufacturer's specifications.
 - (6) 40 CFR §60.4209(a) <u>Federally Enforceable New Source Performance Standard Requirement</u> As an owner or operator of an emergency stationary CI ICE, you must install a non-resettable hour meter prior to startup of the engine.
 - (7) 40 CFR §60.4211(e) <u>Federally Enforceable New Source Performance Standard Requirement</u> Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year.
 - (8) 40 CFR §60.4214(b) <u>Federally Enforceable New Source Performance Standard Requirement</u> **The Permittee** is not required to submit an initial notification (i.e., notifications of construction and startup) under 40 CFR § 60.7. Starting with the model years in table 5 in 40 CFR Part 60, Subpart IIII, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, **the Permittee** must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. **The Permittee** must record the time of operation of the engine and the reason the engine was in operation during that time.
 - (9) 40 CFR §63.6590(b) <u>Federally Enforceable National Emission Standards for Hazardous Air Pollutants Requirement</u> **The Permittee** does not have to meet the requirements of this subpart and of subpart A of 40 CFR Part 63 except for the initial notification requirements of 40 CFR §63.6645(d).

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Section V. Specific Operating Conditions (continued)

D. Emission Unit \$2.005 - Emergency Generator Engine (3MW)

UTM: North 4,373.576 km, East 690.390 km (Zone 11)

System 04 Emergency Diesel Generator (3 MW)

S2.005 Emergency Diesel Generator Engine (3 MW); nominal 19.0 million Btu per hour heat input, 4650 Brake

Horsepower Output

1. NAC 445B.3405

Air Pollution Control Equipment

Emissions from S2.005 shall be controlled via good combustion practices, proper maintenance, and the use of ultra low-sulfur fuel.

b. Nominal Stack Parameters

Height: 20ft
Diameter: 2.25 ft
Stack Temperature: 820 °F
Velocity: 72.2 ft/sec
Volume Flow: 17,225 DSCFM

2. NAC 445B.3405

- a. On and after the date of startup of **S2.005**, Permittee will not discharge or cause the discharge into the atmosphere from the stack discharge of **S2.005**, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **1.3** pound per hour. The discharge of **PM** to the atmosphere will not exceed **0.17** ton per year.
 - (2) NAC 445B.305 The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed 1.3 pound per hour. The discharge of PM_{10} to the atmosphere will not exceed 0.17 ton per year.
 - (3) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere will not exceed **1.3** pounds per hour.
 - (4) NAC 445B.305 The discharge of SO_2 (sulfur dioxide) to the atmosphere will not exceed 0.019 pound per hour. The discharge of SO_2 to the atmosphere will not exceed 0.0024 ton per year.
 - (5) NAC 445B.305 The discharge of NO_x (nitrogen oxides) to the atmosphere will not exceed **37.0** pounds per hour. The discharge of NO_x to the atmosphere will not exceed **4.6** ton per year.
 - (6) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **NO**_x to the atmosphere will not exceed **37.0** pounds per hour.
 - (7) NAC 445B.305 The discharge of **CO** (carbon monoxide) to the atmosphere will not exceed **23.1** pounds per hour. The discharge of **CO** to the atmosphere will not exceed **2.89** ton per year.
 - (8) NAC 445B.305 BACT Emission Limit The discharge of CO to the atmosphere will not exceed 23.1 pounds per hour.
 - (9) NAC 445B.22017 The opacity from the **S2.005** stack discharge will not equal or exceed 20% in accordance with NAC 445B.22017.

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Section V. Specific Operating Conditions (continued)

- D. Emission Unit S2.005 Emergency Generator Engine (3 MW) (continued)
 - 2. NAC 445B.3405
 - **Emission Limits (Continued)**
 - b. New Source Performance Standards
 - (1) 40 CFR §60.4205(b) <u>Federally Enforceable New Source Performance Standard Requirement</u> Owners and operators of 2007 model year or later emergency stationary compression ignition (CI) internal combustion engine (ICE) with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new, non-road CI engines in 40 CFR §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.
 - (i) For engines with a maximum engine power greater than 560 kw, the certification emission standards for new, non-road CI engines for the same model year and maximum engine power in 40 CFR §89.112 and 40 CFR §89.113, for all pollutants beginning in model year 2007 apply. (40 CFR §60.4202(a)(2))
 - (ii) Exhaust emissions from non-road engines to which this subpart is applicable shall not exceed the applicable exhaust emission standards as follows:

 For engines with a rated power of greater than 560 kW, the following emission standards (in g/kW-hr) apply:
 - (A) Non-methane hydrocarbon (NMHC) + Oxides of Nitrogen (NO_x), combined, shall not exceed 6.4 g/kW-hr;
 - (B) Carbon Monoxide (CO) shall not exceed 3.5 g/kW-hr;
 - (C) Particulate Matter (PM) shall not exceed 0.20 g/kW-hr). (40 CFR §89.112(a))
 - (iii) Exhaust opacity from compression ignition, non-road engines, for which this subpart is applicable, must not exceed:
 - (A) 20 percent during the acceleration mode;
 - (B) 15 percent during the lugging mode; and
 - (C) **50** percent during the peaks in either the acceleration or lugging modes.

As measured and calculated per 40 CFR Part 86, Subpart I. (40 CFR §89.113(a) and (b))

- (2) 40 CFR §60.4207(a) <u>Federally Enforceable New Source Performance Standard Requirement</u> Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR §80.510(a).
 - (i) Beginning June 1, 2007, except as otherwise specifically provided in this subpart, all Non-road diesel fuel is subject to the following per-gallon standards:
 - (A) Sulfur content 500 parts per million (ppm) maximum. (40 CFR§ 80.510(a)(1))
 - (B) Cetane index or aromatic content minimum cetane index of 40 or maximum aromatic content of 35 volume percent. (40 CFR§ 80.510(a)(2))

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Section V. Specific Operating Conditions (continued)

- D. Emission Unit S2.005 Emergency Generator Engine (3 MW) (continued)
 - 2. NAC 445B.3405

Emission Limits (Continued)

- b. New Source Performance Standards
 - (3) 40 CFR §60.4207(b) <u>Federally Enforceable New Source Performance Standard Requirement</u> Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR §80.510(b) for non-road diesel fuel.
 - (i) Beginning June 1, 2010, except as otherwise specifically provided in this subpart, all Non-road diesel fuel is subject to the following per-gallon standards:
 - (A) Sulfur content 15 (ppm) maximum. (40 CFR §80.510(b)(1))
 - (B) Cetane index or aromatic content minimum cetane index of 40 or maximum aromatic content of 35 volume percent. (40 CFR §80.510(b)(2))
- 3. NAC 445B.3405

Operating Parameters

- a. **BACT Requirement S2.005** may only combust distillate fuel with a sulfur content not to exceed **0.0015**% sulfur, by weight.
- b. **S2.005** may not combust more than **138.9** gallons of distillate fuel per hour.
- c. **S2.005** may not operate on a routine basis in excess of **250** hours per calendar year. If additional firing is required in case of emergency, *the Permittee* will document the emergency and handle the operation as excess emissions as required by Section III.B.4.
- d. Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. Anyone may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. For owners and operators of emergency engines meeting standards under \$60.4205 but not \$60.4204, any operation other than emergency operation, and maintenance and testing as permitted in this section, is prohibited.

BUREAU OF AIR POLLUTION CONTROL

Facility ID No. A0765

Permit No. AP4911-2241

CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

Issued to: SIERRA PACIFIC RESOURCES COMPANY, ELY ENERGY CENTER, as Permittee

Section V. Specific Operating Conditions (continued)

- D. Emission Unit S2.005 Emergency Generator Engine (3 MW) (continued)
 - 4. NAC 445B.3405
 - Monitoring, Record keeping and Compliance
 - a. Upon commencement of operation, the Permittee will:
 - (1) Monitor and record the total daily hours of operation of **S2.005** each day of operation.
 - (2) Monitor and record the total daily fuel consumption for **S2.005** each day of operation.
 - (3) Record average hourly fuel consumption for **S2.005** each day of operation. The average will be determined using the total hours of operation and total daily fuel consumption in D.4.a.(1) and D.4.a.(2) of this section.
 - (4) Conduct and record a Method 9 visible emissions test on the stack discharge of **S2.005** while the Diesel Engine Driven Generator is operating, on an annual basis. The Method 9 visible emissions test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
 - (5) 40 CFR §60.4211(c) <u>Federally Enforceable New Source Performance Standard Requirement</u> **The Permittee** shall comply with the applicable NSPS Subpart IIII emission limits by purchasing an engine certified to the emission standards in D.2.b.(1) of this section. The engine must be installed and configured according to the manufacturer's specifications.
 - (6) 40 CFR §60.4209(a) *Federally Enforceable New Source Performance Standard Requirement* As an owner or operator of an emergency stationary CI ICE, you must install a non-resettable hour meter prior to startup of the engine.
 - (7) 40 CFR §60.4211(e) <u>Federally Enforceable New Source Performance Standard Requirement</u> Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year.
 - (8) 40 CFR §60.4214(b) <u>Federally Enforceable New Source Performance Standard Requirement</u> **The Permittee** is not required to submit an initial notification (i.e., notifications of construction and startup) under 40 CFR §60.7. Starting with the model years in table 5 in 40 CFR Part 60, Subpart IIII, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, **the Permittee** must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. **The Permittee** must record the time of operation of the engine and the reason the engine was in operation during that time.
 - (9) 40 CFR §63.6590(b) <u>Federally Enforceable National Emission Standards for Hazardous Air Pollutants Requirement</u>

 The Permittee does not have to meet the requirements of this subpart and of subpart A of 40 CFR Part 63 except for the initial notification requirements of 40 CFR §63.6645(d).

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Section V. Specific Operating Conditions (continued)

E. Emission Unit S2.006 - Emergency Firewater Pump Engine

UTM: North 4,374.181 km, East 689.284 km (Zone 11)

System 05 Emergency Firewater Pump Diesel Engine

S2.006 Emergency Firewater Pump Diesel Engine; 788 Brake Horsepower Output

1. NAC 445B.3405

Air Pollution Control Equipment

 Emissions from S2.006 shall be controlled via good combustion practices, proper maintenance, and the use of low-sulfur fuel.

b. Nominal Stack Parameters

Height: 10 ft
Diameter: 1.0 ft
Stack Temperature: 1046 °F
Velocity: 87.2 ft/sec
Volume Flow: 4,111 DSCFM

2. NAC 445B.3405

- a. On and after the date of startup of **S2.006**, Permittee will not discharge or cause the discharge into the atmosphere from the stack discharge of **S2.006**, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.3** pound per hour. The discharge of **PM** to the atmosphere will not exceed **0.0326** ton per year.
 - (2) NAC 445B.305 The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.3** pound per hour. The discharge of PM_{10} to the atmosphere will not exceed **0.0326** ton per year.
 - (3) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of PM_{10} to the atmosphere will not exceed 0.3 pounds per hour.
 - (4) NAC 445B.305 The discharge of SO_2 (sulfur dioxide) to the atmosphere will not exceed **0.003** pound per hour. The discharge of SO_2 to the atmosphere will not exceed **0.0004** ton per year.
 - (5) NAC 445B.305 The discharge of NO_x (nitrogen oxides) to the atmosphere will not exceed 7.3 pounds per hour. The discharge of NO_x to the atmosphere will not exceed 0.911 ton per year.
 - (6) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of NO_x to the atmosphere will not exceed 7.3 pounds per hour.
 - (7) NAC 445B.305 The discharge of **CO** (carbon monoxide) to the atmosphere will not exceed **4.5** pounds per hour. The discharge of **CO** to the atmosphere will not exceed **0.564** ton per year.
 - (8) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **CO** to the atmosphere will not exceed **4.5** pounds per hour.
 - (9) NAC 445B.22017 The opacity from the **S2.006** stack discharge will not equal or exceed 20% in accordance with NAC 445B.22017.

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Section V. Specific Operating Conditions (continued)

- E. Emission Unit S2.006 Emergency Firewater Pump Engine (continued)
 - 2. NAC 445B.3405

Emission Limits (Continued)

- b. New Source Performance Standards
 - (1) 40 CFR § 60.4205(c) <u>Federally Enforceable New Source Performance Standard Requirement</u> Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in Table 4 of 40 CFR Part 60, Subpart IIII. The following emission standards (in g/kw-hr) apply:
 - (i) For engines with a maximum engine power of greater than 560 kW, the following emission standards (in g/kW-hr) apply:
 - (A) Non-methane hydrocarbon (NMHC) + Oxides of Nitrogen (NO_x), combined, shall not exceed **6.4** g/kW-hr;
 - (B) Carbon Monoxide (CO) shall not exceed 3.5 g/kW-hr;
 - (C) Particulate Matter (PM) shall not exceed 0.20 g/kW-hr).
 - (2) 40 CFR § 60.4207(a) <u>Federally Enforceable New Source Performance Standard Requirement</u> Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).
 - (i) Beginning June 1, 2007, except as otherwise specifically provided in this subpart, all Non-road diesel fuel is subject to the following per-gallon standards:
 - (A) Sulfur content 500 parts per million (ppm) maximum. (40 CFR 80.510(a)(1))
 - (B) Cetane index or aromatic content minimum cetane index of 40 or maximum aromatic content of 35 volume percent. (40 CFR § 80.510(a)(2))
 - (3) 40 CFR § 60.4207(b) <u>Federally Enforceable New Source Performance Standard Requirement</u> Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR § 80.510(b) for non-road diesel fuel.
 - (i) Beginning June 1, 2010, except as otherwise specifically provided in this subpart, all Non-road diesel fuel is subject to the following per-gallon standards:
 - (A) Sulfur content 15 (ppm) maximum. (40 CFR 80.510(b)(1))
 - (B) Cetane index or aromatic content minimum cetane index of 40 or maximum aromatic content of 35 volume percent. (40 CFR § 80.510(b)(2))

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Section V. Specific Operating Conditions (continued)

E. Emission Unit S2.006 - Emergency Firewater Pump Engine (continued)

3. NAC 445B.3405

Operating Parameters

- a. BACT Requirement S2.006 may only combust distillate fuel with a sulfur content not to exceed 0.0015% sulfur, by weight.
- b. **S2.006** may not combust more than **33** gallons of distillate fuel per hour.
- c. **S2.006** may not operate on a routine basis in excess of **250** hours per calendar year. If additional firing is required for emergency fire protection, *the Permittee* will document the emergency and handle the operation as excess emissions as required by Section III.B.4.
- d. Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. Anyone may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. For owners and operators of emergency engines meeting standards under \$60.4205 but not \$60.4204, any operation other than emergency operation, and maintenance and testing as permitted in this section, is prohibited.

4. NAC 445B.3405

Monitoring, Record keeping and Compliance

- a. Upon commencement of operation, *the Permittee* will:
 - (1) Monitor and record the total daily hours of operation of **S2.006** each day of operation.
 - (2) Monitor and record the total daily fuel consumption for **S2.006** each day of operation.
 - (3) Record average hourly fuel consumption for **S2.006** each day of operation. The average will be determined using the total hours of operation and total daily fuel consumption in E.4.a.(1) and E.4.a.(2) of this section.
 - (4) Conduct and record a Method 9 visible emissions test on the stack discharges of **S2.006** while the Emergency Diesel Engine Driven Firewater Pump is operating, on an annual basis. The Method 9 visible emissions test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
 - (5) 40 CFR §60.4211(c) <u>Federally Enforceable New Source Performance Standard Requirement</u> **The Permittee** must comply with the applicable NSPS Subpart IIII emission limits by purchasing an engine certified to the emission standards in E.2.b.(1) of this section. The engine must be installed and configured according to the manufacturer's specifications.
 - (6) 40 CFR §60.4209(a) <u>Federally Enforceable New Source Performance Standard Requirement</u> As an owner or operator of an emergency stationary CI ICE, *the Permittee* must install a non-resettable hour meter prior to startup of the engine.
 - (7) 40 CFR §60.4211(e) <u>Federally Enforceable New Source Performance Standard Requirement</u> Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year.
 - (8) 40 CFR §4214(b) <u>Federally Enforceable New Source Performance Standard Requirement</u> **The Permittee** is not required to submit an initial notification (i.e., notifications of construction and startup) under 40 CFR §60.7. Starting with the model years in table 5 in 40 CFR Part 60, Subpart IIII, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, **the Permittee** must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. **The Permittee** must record the time of operation of the engine and the reason the engine was in operation during that time.

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Section V. Specific Operating Conditions (continued)

F. Emission Unit S2.007 – Emergency Firewater Booster Pump Diesel Engine

UTM: North 4,374.597 km, East 690.010 km (Zone 11)

System 06 Emergency Firewater Booster Pump Diesel Engine

S2.007 Emergency Firewater Booster Pump Diesel Engine; 90 Brake Horsepower Output

1. NAC 445B.3405

Air Pollution Control Equipment

 Emissions from S2.007 shall be controlled via good combustion practices, proper maintenance, and the use of low-sulfur fuel.

b. Nominal Stack Parameters

Height: 10 ft
Diameter: 0.67 ft
Stack Temperature: 95 °F
Velocity: 17.3 ft/sec
Volume Flow: 362 DSCFM

2. NAC 445B.3405

- a. On and after the date of startup of **S2.007**, Permittee will not discharge or cause the discharge into the atmosphere from the stack discharge of **S2.007**, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.1** pound per hour. The discharge of **PM** to the atmosphere will not exceed **0.0074** ton per year.
 - (2) NAC 445B.305 The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.1** pound per hour. The discharge of PM_{10} to the atmosphere will not exceed **0.0074** ton per year.
 - (3) NAC 445B.305 <u>BACT Emission Limit</u>—The discharge of **PM**₁₀ to the atmosphere will not exceed **0.1** pounds per hour.
 - (4) NAC 445B.305 The discharge of **SO₂** (sulfur dioxide) to the atmosphere will not exceed **0.0004** pound per hour. The discharge of **SO₂** to the atmosphere will not exceed **0.00005** ton per year.
 - (5) NAC 445B.305 The discharge of NO_x (nitrogen oxides) to the atmosphere will not exceed **0.6** pounds per hour. The discharge of NO_x to the atmosphere will not exceed **0.078** ton per year.
 - (6) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of NO_x to the atmosphere will not exceed 0.6 pounds per hour.
 - (7) NAC 445B.305 The discharge of **CO** (carbon monoxide) to the atmosphere will not exceed **0.7** pounds per hour. The discharge of **CO** to the atmosphere will not exceed **0.0918** ton per year.
 - (8) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **CO** to the atmosphere will not exceed **0.7** pounds per hour.
 - (9) NAC 445B.22017 The opacity from the **S2.007** stack discharge will not equal or exceed 20% in accordance with NAC 445B.22017.

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Section V. Specific Operating Conditions (continued)

- F. Emission Unit S2.007 Emergency Firewater Booster Pump Diesel Engine (continued)
 - 2. NAC 445B.3405
 - **Emission Limits (Continued)**
 - b. New Source Performance Standards
 - (1) 40 CFR § 60.4205(c) <u>Federally Enforceable New Source Performance Standard Requirement</u> Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in Table 4 of 40 CFR Part 60, Subpart IIII. The following emission standards (in g/kw-hr) apply
 - (i) For engines with a maximum engine power of greater than or equal to 56 kW and less than 75 kW, the following emission standards (in g/kW-hr) apply:
 - (A) Non-methane hydrocarbon (NMHC) + Oxides of Nitrogen (NO_x), combined, shall not exceed 4.7 g/kW-hr;
 - (B) Carbon Monoxide (CO) shall not exceed 5.0 g/kW-hr;
 - (C) Particulate Matter (PM) shall not exceed 0.40 g/kW-hr).
 - (2) 40 CFR § 60.4207(a) <u>Federally Enforceable New Source Performance Standard Requirement</u> Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).
 - (i) Beginning June 1, 2007, except as otherwise specifically provided in this subpart, all Non-road diesel fuel is subject to the following per-gallon standards:
 - (A) Sulfur content 500 parts per million (ppm) maximum. (40 CFR 80.510(a)(1))
 - (B) Cetane index or aromatic content minimum cetane index of 40 or maximum aromatic content of 35 volume percent. (40 CFR § 80.510(a)(2))
 - (3) 40 CFR § 60.4207(b) <u>Federally Enforceable New Source Performance Standard Requirement</u> Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR § 80.510(b) for non-road diesel fuel.
 - (i) Beginning June 1, 2010, except as otherwise specifically provided in this subpart, all Non-road diesel fuel is subject to the following per-gallon standards:
 - (A) Sulfur content 15 (ppm) maximum. (40 CFR 80.510(b)(1))
 - (B) Cetane index or aromatic content minimum cetane index of 40 or maximum aromatic content of 35 volume percent. (40 CFR § 80.510(b)(2))

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Section V. Specific Operating Conditions (continued)

F. Emission Unit S2.007 – Emergency Firewater Booster Pump Diesel Engine (continued)

3. NAC 445B.3405

Operating Parameters

- a. **BACT Requirement S2.007** may only combust distillate fuel with a sulfur content not to exceed **0.0015**% sulfur, by weight.
- b. **S2.007** may not combust more than **4.2** gallons of distillate fuel per hour.
- c. **S2.007** may not operate on a routine basis in excess of **250** hours per calendar year. If additional firing is required for emergency fire protection, *the Permittee* will document the emergency and handle the operation as excess emissions as required by Section III.B.4.
- d. Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. Anyone may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. For owners and operators of emergency engines meeting standards under \$60.4205 but not \$60.4204, any operation other than emergency operation, and maintenance and testing as permitted in this section, is prohibited.

4. NAC 445B.3405

Monitoring, Record keeping and Compliance

- a. Upon commencement of operation, *the Permittee* will:
 - (1) Monitor and record the total daily hours of operation of **S2.007** each day of operation.
 - (2) Monitor and record the total daily fuel consumption for **S2.007** each day of operation.
 - (3) Record average hourly fuel consumption for **S2.007** each day of operation. The average will be determined using the total hours of operation and total daily fuel consumption in F.4.a.(1) and F.4.a.(2) of this section.
 - (4) Conduct and record a Method 9 visible emissions test on the stack discharges of **S2.007** while the Emergency Diesel Engine Driven Firewater Pump is operating, on an annual basis. The Method 9 visible emissions test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
 - (5) 40 CFR §60.4211(c) <u>Federally Enforceable New Source Performance Standard Requirement</u> **The Permittee** must comply with the applicable NSPS Subpart IIII emission limits by purchasing an engine certified to the emission standards in E.2.b.(1) of this section. The engine must be installed and configured according to the manufacturer's specifications.
 - (6) 40 CFR §60.4209(a) *Federally Enforceable New Source Performance Standard Requirement* As an owner or operator of an emergency stationary CI ICE, *the Permittee* must install a non-resettable hour meter prior to startup of the engine.
 - (7) 40 CFR §60.4211(e) <u>Federally Enforceable New Source Performance Standard Requirement</u> Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year.
 - (8) 40 CFR §4214(b) <u>Federally Enforceable New Source Performance Standard Requirement</u> **The Permittee** is not required to submit an initial notification (i.e., notifications of construction and startup) under 40 CFR §60.7. Starting with the model years in table 5 in 40 CFR Part 60, Subpart IIII, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, **the Permittee** must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. **The Permittee** must record the time of operation of the engine and the reason the engine was in operation during that time.

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Section V. Specific Operating Conditions (continued)

G. Emission Unit S2.008 - Emergency Absorber Firewater Pump Engine

UTM: North 4,374.168 km, East 689.284 km (Zone 11)

System 07 Emergency SO₂ Absorber Quench Fire Pump Diesel Engine

S2.008 Emergency SO₂ Absorber Quench Fire Pump Diesel Engine; 683 Brake Horsepower Output

1. NAC 445B.3405

Air Pollution Control Equipment

 Emissions from S2.008 shall be controlled via good combustion practices, proper maintenance, and the use of low-sulfur fuel.

b. Nominal Stack Parameters

Height: 10 ft
Diameter: 1.0 ft
Stack Temperature: 1000 °F
Velocity: 65.8 ft/sec
Volume Flow: 3,100 DSCFM

2. NAC 445B.3405

- a. On and after the date of startup of **S2.008**, Permittee will not discharge or cause the discharge into the atmosphere from the stack discharge of **S2.008**, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.2** pound per hour. The discharge of **PM** to the atmosphere will not exceed **0.03** ton per year.
 - (2) NAC 445B.305 The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.2** pound per hour. The discharge of PM_{10} to the atmosphere will not exceed **0.03** ton per year.
 - (3) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of PM_{10} to the atmosphere will not exceed 0.2 pounds per hour.
 - (4) NAC 445B.305 The discharge of SO₂ (sulfur dioxide) to the atmosphere will not exceed **0.003** pound per hour. The discharge of SO₂ to the atmosphere will not exceed **0.0003** ton per year.
 - (5) NAC 445B.305 The discharge of NO_x (nitrogen oxides) to the atmosphere will not exceed 3.9 pounds per hour. The discharge of NO_x to the atmosphere will not exceed 0.5 ton per year.
 - (6) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of NO_x to the atmosphere will not exceed 3.9 pounds per hour.
 - (7) NAC 445B.305 The discharge of **CO** (carbon monoxide) to the atmosphere will not exceed **3.9** pounds per hour. The discharge of **CO** to the atmosphere will not exceed **0.49** ton per year.
 - (8) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **CO** to the atmosphere will not exceed **3.9** pounds per hour.
 - (9) NAC 445B.22017 The opacity from the **S2.008** stack discharge will not equal or exceed 20% in accordance with NAC 445B.22017.

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Section V. Specific Operating Conditions (continued)

- G. Emission Unit S2.008 Emergency Absorber Firewater Pump Engine (continued)
 - 2. NAC 445B.3405
 - **Emission Limits (Continued)**
 - b. New Source Performance Standards
 - (1) 40 CFR § 60.4205(c) <u>Federally Enforceable New Source Performance Standard Requirement</u> Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in Table 4 of 40 CFR Part 60, Subpart IIII. The following emission standards (in g/kw-hr) apply
 - (i) For engines with a maximum engine power of greater than or equal to 450 kW and less than 560 kW, the following emission standards (in g/kW-hr) apply:
 - (A) Non-methane hydrocarbon (NMHC) + Oxides of Nitrogen (NO_x), combined, shall not exceed 4.0 g/kW-hr;
 - (B) Carbon Monoxide (CO) shall not exceed 3.5 g/kW-hr;
 - (C) Particulate Matter (PM) shall not exceed 0.20 g/kW-hr).
 - (2) 40 CFR § 60.4207(a) <u>Federally Enforceable New Source Performance Standard Requirement</u> Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).
 - (i) Beginning June 1, 2007, except as otherwise specifically provided in this subpart, all Non-road diesel fuel is subject to the following per-gallon standards:
 - (A) Sulfur content 500 parts per million (ppm) maximum. (40 CFR 80.510(a)(1))
 - (B) Cetane index or aromatic content minimum cetane index of 40 or maximum aromatic content of 35 volume percent. (40 CFR § 80.510(a)(2))
 - (3) 40 CFR § 60.4207(b) <u>Federally Enforceable New Source Performance Standard Requirement</u> Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR § 80.510(b) for non-road diesel fuel.
 - (i) Beginning June 1, 2010, except as otherwise specifically provided in this subpart, all Non-road diesel fuel is subject to the following per-gallon standards:
 - (A) Sulfur content 15 (ppm) maximum. (40 CFR 80.510(b)(1))
 - (B) Cetane index or aromatic content minimum cetane index of 40 or maximum aromatic content of 35 volume percent. (40 CFR § 80.510(b)(2))

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Issued to: SIERRA PACIFIC RESOURCES COMPANY, ELY ENERGY CENTER, as Permittee

Section V. Specific Operating Conditions (continued)

G. Emission Unit S2.008 - Emergency Absorber Firewater Pump Engine (continued)

3. NAC 445B.3405

Operating Parameters

- a. **BACT Requirement S2.008** may only combust distillate fuel with a sulfur content not to exceed **0.0015**% sulfur, by weight.
- b. **S2.008** may not combust more than **29.1** gallons of distillate fuel per hour.
- c. **S2.008** may not operate on a routine basis in excess of **250** hours per calendar year. If additional firing is required for emergency fire protection, *the Permittee* will document the emergency and handle the operation as excess emissions as required by Section III.B.4.
- d. Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. Anyone may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. For owners and operators of emergency engines meeting standards under \$60.4205 but not \$60.4204, any operation other than emergency operation, and maintenance and testing as permitted in this section, is prohibited.

4. NAC 445B.3405

Monitoring, Record keeping and Compliance

- a. Upon commencement of operation, *the Permittee* will:
 - (1) Monitor and record the total daily hours of operation of **S2.008** each day of operation.
 - (2) Monitor and record the total daily fuel consumption for **S2.008** each day of operation.
 - (3) Record average hourly fuel consumption for **S2.008** each day of operation. The average will be determined using the total hours of operation and total daily fuel consumption in G.4.a.(1) and G.4.a.(2) of this section.
 - (4) Conduct and record a Method 9 visible emissions test on the stack discharges of **S2.008** while the Emergency Diesel Engine Driven Firewater Pump is operating, on an annual basis. The Method 9 visible emissions test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
 - (5) 40 CFR §60.4211(c) <u>Federally Enforceable New Source Performance Standard Requirement</u> **The Permittee** must comply with the applicable NSPS Subpart IIII emission limits by purchasing an engine certified to the emission standards in E.2.b.(1) of this section. The engine must be installed and configured according to the manufacturer's specifications.
 - (6) 40 CFR §60.4209(a) <u>Federally Enforceable New Source Performance Standard Requirement</u> As an owner or operator of an emergency stationary CI ICE, **the Permittee** must install a non-resettable hour meter prior to startup of the engine.
 - (7) 40 CFR §60.4211(e) <u>Federally Enforceable New Source Performance Standard Requirement</u> Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year.
 - (8) 40 CFR §4214(b) <u>Federally Enforceable New Source Performance Standard Requirement</u> **The Permittee** is not required to submit an initial notification (i.e., notifications of construction and startup) under 40 CFR §60.7. Starting with the model years in table 5 in 40 CFR Part 60, Subpart IIII, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, **the Permittee** must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. **The Permittee** must record the time of operation of the engine and the reason the engine was in operation during that time.

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Issued to: SIERRA PACIFIC RESOURCES COMPANY, ELY ENERGY CENTER, as Permittee

Section V. Specific Operating Conditions (continued)

H. Emission Unit S2.009 - Coal Unloading Building - Rotary Car Dumper UTM: North 4,375.621 km, East 689.455 km (Zone 11) Emission Unit PF1.001 - Coal Unloading Belt Feeder Transfer Point UTM: North 4,375.553 km, East 689.463 km (Zone 11)

System 8 Coal Unloading Building

S2.009 Rotary Car Dumper

PF1.001 Coal Unloading Belt Feeder Transfer Point (under the track hoppers in the Coal Unloading Building)

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.009** shall be ducted to a control system consisting of a **Fabric Filter** with 100% capture and a maximum volume flow rate of **160,000** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

b. Nominal Stack Parameters

Height: 6.0 ft
Diameter: 7.5 ft
Exhaust Temperature: 68 °F
Velocity: 60.3 ft/sec
Volume Flow: 160,000 DSCFM

c. Emissions from **PF1.001** shall be controlled by material conditioning and dust suppression sprays if necessary.

2. NAC 445B.3405

- a. On and after the date of startup of **S2.009** and **PF1.001**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **the Coal Unloading Building's Fabric Filter**, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **6.86** pound per hour, based on a 3-hour averaging period. This limit is less than the **96.96** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by **H.3.a** of this section.
 - (2) NAC 445B.305 The discharge of **PM**₁₀ (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **6.86** pound per hour, based on a 3-hour averaging period. This limit is less than the **96.96** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by **H.3.a** of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **the Rotary Car Dumper Fabric Filter and PF1.001**will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the exhaust stack of **the Rotary** Car Dumper Fabric Filter will not exceed **0.005** grain per dry standard cubic foot, based on a 3-hour averaging period.
- b. New Source Performance Standards Subpart Y Standards of Performance for Coal Preparation Plants (40 CFR Part 60.250) On and after the sixtieth day after achieving the maximum production rate at which **S2.009 and PF1.001** will be operated, but not later than 180 days after initial startup, *the Permittee* will not discharge or cause the discharge into the atmosphere from **S2.009 and PF1.001** the following pollutants in excess of the following specified limits:
 - (1) Emissions that exhibit equal to or greater than 20 percent opacity (40 CFR Part 60.252(c))
 - (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c))
 - (3) At all times, including periods of startup, shutdown, and malfunction, *the Permittee* shall, to the extent practicable, maintain and operate **S2.009 and PF1.001** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d))

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Section V. Specific Operating Conditions (continued)

H. Emission Unit S2.009 and PF1.001 - Rotary Car Dumper and Belt Feeder (continued)

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for **S2.009** and **PF1.001** will not exceed **4000.0** tons of coal per any one-hour period.
- b. **S2.009 and PF1.001** may operate **8,760** hours per calendar year.
- 4. NAC 445B.3405
 - a. Monitoring, Testing and Record keeping

Upon commencement of operations, Permittee will:

- (1) Monitor and record the loading rate of coal to **S2.009** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.009** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **Rotary Car Dumper Fabric Filter** and **PF1.001** while **System 8** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **the Rotary Car Dumper Fabric Filter** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Section V. Specific Operating Conditions (continued)

H. Emission Unit S2.009 and PF1.001 - Rotary Car Dumper and Belt Feeder (continued)

5. NAC 445B.3405

- a. **NSPS Subpart Y Compliance Requirements -** *The Permittee* shall comply with 40 CFR Part 60, Subpart Y by complying with the following conditions:
 - (1) *The Permittee* shall submit a notification of the date construction of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form. (40 CFR §60.7(a)(1))
 - (2) *The Permittee* shall submit a notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date. (40 CFR §60.7(a)(3))
 - (3) *The Permittee* shall submit a notification of the anticipated date for conducting the opacity observations required by §60.11(e)(1). The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date. (40 §60.7(a)(6))
 - (4) *The Permittee* shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of **System 08**. (40 CFR §60.7(b))
 - (5) Compliance with NSPS Subpart Y opacity standards shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60 or any alternative method that is approved by the Administrator. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test. (40 CFR §60.11(b))
 - (6) Opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. *The Permittee* shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. (40 CFR §60.11(e)(1))
 - (7) Except as provided in **H.5.a.(8)** of this section, *the Permittee* shall conduct opacity observations in accordance with **H.5.a.(5)** of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results. The inability of *the Permittee* to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations. (40 CFR §60.11(e)(2))
 - (8) *The Permittee* may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. *The Permittee* shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the opacity testing notification required in §60.7(a)(6). (40 CFR §60.11(e)(3))

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Section V. Specific Operating Conditions (continued)

I. Emission Unit S2.010 - Transfer Tower #1

UTM: North 4,375.331 km, East 689.549 km (Zone 11)

System 9 Transfer Tower #1

S2.010 Transfer Tower #1

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.010** shall be ducted to a control system consisting of a **Fabric Filter** with 100% capture and a maximum volume flow rate of **21,000** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

b. Nominal Stack Parameters

Height: 200.0 ft
Diameter: 2.85 ft
Exhaust Temperature: 68 °F
Velocity: 51.66 ft/sec
Volume Flow: 21,000 DSCFM

2. NAC 445B.3405

- a. On and after the date of startup of **S2.010**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **the Trasfer Tower #1**, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.9** pound per hour, based on a 3-hour averaging period. This limit is less than the **96.96** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by I.3.a of this section.
 - (2) NAC 445B.305 The discharge of **PM**₁₀ (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.9** pound per hour, based on a 3-hour averaging period. This limit is less than the **96.96** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by I.3.a of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **the Transfer Tower Fabric Filter** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the exhaust stack of **the Transfer Tower's Fabric Filter** will not exceed **0.005** grain per dry standard cubic foot, based on a 3-hour averaging period.
- b. New Source Performance Standards Subpart Y Standards of Performance for Coal Preparation Plants (40 CFR Part 60.250) On and after the sixtieth day after achieving the maximum production rate at which **S2.010** will be operated, but not later than 180 days after initial startup, *the Permittee* will not discharge or cause the discharge into the atmosphere from **S2.010** the following pollutants in excess of the following specified limits:
 - (1) Emissions that exhibit equal to or greater than 20 percent opacity (40 CFR Part 60.252(c))
 - (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c))
 - (3) At all times, including periods of startup, shutdown, and malfunction, *the Permittee* shall, to the extent practicable, maintain and operate **S2.010** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d))

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Section V. Specific Operating Conditions (continued)

- I. Emission Unit S2.010 Transfer Tower #1 (continued)
 - 3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for \$2.010 will not exceed 4000.0 tons of coal per any one-hour period.
- b. **S2.010** may operate **8,760** hours per calendar year.
- 4. NAC 445B.3405
 - a. Monitoring, Testing and Record keeping

Upon commencement of operations, Permittee will:

- (1) Monitor and record the loading rate of coal to **S2.010** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.010** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **Transfer Tower's Fabric Filter** while **System 9** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **the Transfer Tower's Fabric Filter** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Section V. Specific Operating Conditions (continued)

- I. Emission Unit S2.010 Transfer Tower #1 (continued)
 - 5. NAC 445B.3405
 - a. **NSPS Subpart Y Compliance Requirements -** *The Permittee* shall comply with 40 CFR Part 60, Subpart Y by complying with the following conditions:
 - (1) *The Permittee* shall submit a notification of the date construction of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form. (40 CFR §60.7(a)(1))
 - (2) *The Permittee* shall submit a notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date. (40 CFR §60.7(a)(3))
 - (3) *The Permittee* shall submit a notification of the anticipated date for conducting the opacity observations required by §60.11(e)(1). The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date. (40 §60.7(a)(6))
 - (4) *The Permittee* shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of **System 09**. (40 CFR §60.7(b))
 - (5) Compliance with NSPS Subpart Y opacity standards shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60 or any alternative method that is approved by the Administrator. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test. (40 CFR §60.11(b))
 - (6) Opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. *The Permittee* shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. (40 CFR §60.11(e)(1))
 - (7) Except as provided in **I.5.a.(8)** of this section, *the Permittee* shall conduct opacity observations in accordance with **I.5.a.(5)** of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results. The inability of *the Permittee* to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations. (40 CFR §60.11(e)(2))
 - (8) *The Permittee* may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. *The Permittee* shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the opacity testing notification required in §60.7(a)(6). (40 CFR §60.11(e)(3))

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Section V. Specific Operating Conditions (continued)

J. Emission Unit S2.011 - Coal Storage Dome #1

UTM: North 4,375.371 km, East 689.443 km (Zone 11)

System 10 Coal Storage Dome #1

S2.011 Coal Storage Dome #1

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.011** shall be ducted to a control system consisting of a **Fabric Filter** with 100% capture and a maximum volume flow rate of **150,000** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

b. Nominal Stack Parameters

Height: 6.0 ft
Diameter: 7.25 ft
Exhaust Temperature: 68 °F
Velocity: 60.5 ft/sec

Volume Flow: 150,000 DSCFM

2. NAC 445B.3405

- a. On and after the date of startup of **S2.011**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **the** *Coal Storage Dome* #1, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **6.43** pound per hour, based on a 3-hour averaging period. This limit is less than the **96.96** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by J.3.a of this section.
 - (2) NAC 445B.305 The discharge of PM₁₀ (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **6.43** pound per hour, based on a 3-hour averaging period. This limit is less than the **96.96** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by J.3.a of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **the** *Coal Storage Dome #1* **Fabric Filter** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the exhaust stack of **the** *Coal* **Storage Dome #1 Fabric Filter** will not exceed **0.005** grain per dry standard cubic foot, based on a 3-hour averaging period.
- b. New Source Performance Standards Subpart Y Standards of Performance for Coal Preparation Plants (40 CFR Part 60.250) On and after the sixtieth day after achieving the maximum production rate at which **S2.011** will be operated, but not later than 180 days after initial startup, *the Permittee* will not discharge or cause the discharge into the atmosphere from **S2.011** the following pollutants in excess of the following specified limits:
 - (1) Emissions that exhibit equal to or greater than 20 percent opacity (40 CFR Part 60.252(c))
 - (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c))
 - (3) At all times, including periods of startup, shutdown, and malfunction, *the Permittee* shall, to the extent practicable, maintain and operate **S2.011** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d))

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Section V. Specific Operating Conditions (continued)

- J. Emission Unit S2.011 Coal Storage Dome #1 (continued)
 - 3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for **S2.011** will not exceed **4,000.0** tons of coal per any one-hour period.
- b. **S2.011** may operate **8,760** hours per calendar year.
- 4. NAC 445B.3405
 - a. Monitoring, Testing and Record keeping

Upon commencement of operations, Permittee will:

- (1) Monitor and record the loading rate of coal to **S2.011** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.011** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of *Coal Storage Dome #1* Fabric Filter while **System 10** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **the** *Coal Storage Dome #1* **Fabric Filter** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Section V. Specific Operating Conditions (continued)

- J. Emission Unit S2.011 Coal Storage Dome #1 (continued)
 - 5. NAC 445B.3405
 - a. **NSPS Subpart Y Compliance Requirements** *The Permittee* shall comply with 40 CFR Part 60, Subpart Y by complying with the following conditions:
 - (1) *The Permittee* shall submit a notification of the date construction of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form. (40 CFR §60.7(a)(1))
 - (2) *The Permittee* shall submit a notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date. (40 CFR §60.7(a)(3))
 - (3) *The Permittee* shall submit a notification of the anticipated date for conducting the opacity observations required by §60.11(e)(1). The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date. (40 §60.7(a)(6))
 - (4) *The Permittee* shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of **System 10**. (40 CFR §60.7(b))
 - (5) Compliance with NSPS Subpart Y opacity standards shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60 or any alternative method that is approved by the Administrator. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test. (40 CFR §60.11(b))
 - (6) Opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. *The Permittee* shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. (40 CFR §60.11(e)(1))
 - (7) Except as provided in **J.5.a.(8)** of this section, *the Permittee* shall conduct opacity observations in accordance with **J.5.a.(5)** of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results. The inability of *the Permittee* to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations. (40 CFR §60.11(e)(2))
 - (8) *The Permittee* may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. *The Permittee* shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the opacity testing notification required in §60.7(a)(6). (40 CFR §60.11(e)(3))

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CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

Issued to: SIERRA PACIFIC RESOURCES COMPANY, ELY ENERGY CENTER, as Permittee

Section V. Specific Operating Conditions (continued)

K. Emission Unit S2.012 - Coal Storage Dome #2

UTM: North 4,375.314 km, East 689.666 km (Zone 11)

System 11 Coal Storage Dome #2

S2.012 Coal Storage Dome #2

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.012** shall be ducted to a control system consisting of a **Fabric Filter** with 100% capture and a maximum volume flow rate of **150,000** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

b. Nominal Stack Parameters

Height: 6.0 ft
Diameter: 7.25 ft
Exhaust Temperature: 68 °F
Velocity: 60.5 ft/sec

Volume Flow: 150,000 DSCFM

2. NAC 445B.3405

- a. On and after the date of startup of **S2.012**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **the** *Coal Storage Dome* #2, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **6.43** pound per hour, based on a 3-hour averaging period. This limit is less than the **96.96** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by **K.3.a** of this section.
 - (2) NAC 445B.305 The discharge of PM₁₀ (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **6.43** pound per hour, based on a 3-hour averaging period. This limit is less than the **96.96** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by **K.3.a** of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **the** *Coal Storage Dome #2* **Fabric Filter** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the exhaust stack of **the** *Coal* **Storage Dome #2 Fabric Filter** will not exceed **0.005** grain per dry standard cubic foot, based on a 3-hour averaging period.
- b. New Source Performance Standards Subpart Y Standards of Performance for Coal Preparation Plants (40 CFR Part 60.250) On and after the sixtieth day after achieving the maximum production rate at which **S2.012** will be operated, but not later than 180 days after initial startup, *the Permittee* will not discharge or cause the discharge into the atmosphere from **S2.012** the following pollutants in excess of the following specified limits:
 - (1) Emissions that exhibit equal to or greater than 20 percent opacity (40 CFR Part 60.252(c))
 - (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c))
 - (3) At all times, including periods of startup, shutdown, and malfunction, *the Permittee* shall, to the extent practicable, maintain and operate **S2.012** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d))

BUREAU OF AIR POLLUTION CONTROL

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Permit No. AP4911-2241

CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

Issued to: SIERRA PACIFIC RESOURCES COMPANY, ELY ENERGY CENTER, as Permittee

Section V. Specific Operating Conditions (continued)

K. Emission Unit S2.012 - Coal Storage Dome #2 (continued)

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for \$2.012 will not exceed 4,000.0 tons of coal per any one-hour period.
- b. **S2.012** may operate **8,760** hours per calendar year.
- 4. NAC 445B.3405
 - a. Monitoring, Testing and Record keeping

Upon commencement of operations, Permittee will:

- (1) Monitor and record the loading rate of coal to **S2.012** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.012** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of *Coal Storage Dome #2* Fabric Filter while **System 11** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **the** *Coal Storage Dome #2* **Fabric Filter** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

Issued to: SIERRA PACIFIC RESOURCES COMPANY, ELY ENERGY CENTER, as Permittee

Section V. Specific Operating Conditions (continued)

K. Emission Unit S2.012 - Coal Storage Dome #2 (continued)

- 5. NAC 445B.3405
 - a. **NSPS Subpart Y Compliance Requirements -** *The Permittee* shall comply with 40 CFR Part 60, Subpart Y by complying with the following conditions:
 - (1) *The Permittee* shall submit a notification of the date construction of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form. (40 CFR §60.7(a)(1))
 - (2) *The Permittee* shall submit a notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date. (40 CFR §60.7(a)(3))
 - (3) *The Permittee* shall submit a notification of the anticipated date for conducting the opacity observations required by §60.11(e)(1). The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date. (40 §60.7(a)(6))
 - (4) *The Permittee* shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of **System 11**. (40 CFR §60.7(b))
 - (5) Compliance with NSPS Subpart Y opacity standards shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60 or any alternative method that is approved by the Administrator. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test. (40 CFR §60.11(b))
 - (6) Opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. *The Permittee* shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. (40 CFR §60.11(e)(1))
 - (7) Except as provided in **K.5.a.(8)** of this section, *the Permittee* shall conduct opacity observations in accordance with **K.5.a.(5)** of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results. The inability of *the Permittee* to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations. (40 CFR §60.11(e)(2))
 - (8) *The Permittee* may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. *The Permittee* shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the opacity testing notification required in §60.7(a)(6). (40 CFR §60.11(e)(3))

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CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

Issued to: SIERRA PACIFIC RESOURCES COMPANY, ELY ENERGY CENTER, as Permittee

Section V. Specific Operating Conditions (continued)

L. Emission Units PF1.002 - Coal Transfer Operations, Coal Stack-out Operations

UTM: North 4,375.285 km, East 689.887 km (Zone 11)

System 12 Coal Transfer Operations, Coal Stock-out Conveyor

PF1.002 Stock-out Conveyor to Stack-out Pile

1. NAC 445B.3405

Air Pollution Control Equipment

Emissions from PF1.002 shall be controlled by enclosed conveyor, telescoping spout.

2. NAC 445B.3405

Emission Limits

On and after the date of startup of **PF1.002**, *the Permittee* will not discharge or cause the discharge into the atmosphere from **PF1.002**, the following pollutants in excess of the following specified limits:

- a. (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere from **PF1.002** will not exceed **0.07** pound per hour. This limit is less than the **96.96** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by L.3.a of this section.
 - (2) NAC 445B.305 The discharge of **PM**₁₀ (particulate matter less than 10 microns in diameter) to the atmosphere from **PF1.002** will not exceed **0.07** pound per hour. This limit is less than the **96.96** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by L.3.a of this section.
 - (3) NAC 445B.22017 The opacity from **PF1.002** will not equal or exceed 20% in accordance with NAC 445B.22017.
- b. New Source Performance Standards Subpart Y Standards of Performance for Coal Preparation Plants (40 CFR Part 60.250) On and after the sixtieth day after achieving the maximum production rate at which **PF1.002** will be operated, but not later than 180 days after initial startup, *the Permittee* will not discharge or cause the discharge into the atmosphere from **PF1.002** the following pollutants in excess of the following specified limits:
 - (1) Emissions that exhibit equal to or greater than 20 percent opacity (40 CFR Part 60.252(c))
 - (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c))
 - (3) At all times, including periods of startup, shutdown, and malfunction, *the Permittee* shall, to the extent practicable, maintain and operate **PF1.002** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d))

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable throughput rate for **PF1.002**, will not exceed **4.000** tons of coal per any one-hour period.
- b. **PF1.002**, may operate **8,760** hours per calendar year.
- d. *BACT Requirement* Emissions from **PF1.002** shall be controlled by enclosed conveyor, telescoping spout and dust suppression.

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CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

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Section V. Specific Operating Conditions (continued)

L. Emission Units PF1.002 - Coal Stack-out Conveyor (continued)

- 4. NAC 445B.3405
 - a. Monitoring, Testing and Record keeping

Upon commencement of operations, the Permittee will:

- (1) Monitor and record the throughput rate of coal to **PF1.002**, on a daily basis.
- (2) Monitor and record the hours of operation of **PF1.002**, on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on **PF1.002**, while **System 12** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.

5. NAC 445B.3405

- a. **NSPS Subpart Y Compliance Requirements** *The Permittee* shall comply with 40 CFR Part 60, Subpart Y by complying with the following conditions:
 - (1) *The Permittee* shall submit a notification of the date construction of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form. (40 CFR §60.7(a)(1))
 - (2) *The Permittee* shall submit a notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date. (40 CFR §60.7(a)(3))
 - (3) *The Permittee* shall submit a notification of the anticipated date for conducting the opacity observations required by §60.11(e)(1). The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date. (40 §60.7(a)(6))
 - (4) *The Permittee* shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of **System 12**. (40 CFR §60.7(b))
 - (5) Compliance with NSPS Subpart Y opacity standards shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60 or any alternative method that is approved by the Administrator. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test. (40 CFR §60.11(b))
 - (6) Opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. *The Permittee* shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. (40 CFR §60.11(e)(1))
 - (7) Except as provided in **L.5.a.(8)** of this section, *the Permittee* shall conduct opacity observations in accordance with **L.5.a.(5)** of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results. The inability of *the Permittee* to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations. (40 CFR §60.11(e)(2))
 - (8) *The Permittee* may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. *The Permittee* shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the opacity testing notification required in §60.7(a)(6). (40 CFR §60.11(e)(3))

BUREAU OF AIR POLLUTION CONTROL

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Permit No. AP4911-2241

CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

Issued to: SIERRA PACIFIC RESOURCES COMPANY, ELY ENERGY CENTER, as Permittee

Section V. Specific Operating Conditions (continued)

M. Emission Unit S2.010 - Transfer Tower #2

UTM: North 4,375.242 km, East 689.759 km (Zone 11)

System 13 Transfer Tower #2 (This system also includes emissions from the reclaim coal hoppers and belt Feeders that transfer coal from the reserve pile to Transfer Tower #2)

S2.013 Transfer Tower #2

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.013** shall be ducted to a control system consisting of a **Fabric Filter** with 100% capture and a maximum volume flow rate of **21,000** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

b. Nominal Stack Parameters

Height: 200.0 ft
Diameter: 2.85 ft
Exhaust Temperature: 68 °F
Velocity: 51.66 ft/sec
Volume Flow: 21,000 DSCFM

2. NAC 445B 3405

- a. On and after the date of startup of **S2.013**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **the Trasfer Tower #2**, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.9** pound per hour, based on a 3-hour averaging period. This limit is less than the **100.97** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by M.3.a of this section.
 - (2) NAC 445B.305 The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed 0.9 pound per hour, based on a 3-hour averaging period. This limit is less than the 100.97 pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by M.3.a of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **the Transfer Tower Fabric Filter** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the exhaust stack of **the Transfer Tower Fabric Filter** will not exceed **0.005** grain per dry standard cubic foot, based on a 3-hour averaging period.
- b. New Source Performance Standards Subpart Y Standards of Performance for Coal Preparation Plants (40 CFR Part 60.250) On and after the sixtieth day after achieving the maximum production rate at which **S2.013** will be operated, but not later than 180 days after initial startup, *the Permittee* will not discharge or cause the discharge into the atmosphere from **S2.013** the following pollutants in excess of the following specified limits:
 - (1) Emissions that exhibit equal to or greater than 20 percent opacity (40 CFR Part 60.252(c))
 - (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c))
 - (3) At all times, including periods of startup, shutdown, and malfunction, *the Permittee* shall, to the extent practicable, maintain and operate **S2.013** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d))

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Section V. Specific Operating Conditions (continued)

M. Emission Unit S2.013 - Transfer Tower #2 (continued)

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for **S2.013** will not exceed **5200.0** tons of coal per any one-hour period (2,600 tons per hour from coal storage and 2600 tons per hour from reserve reclaim coal pile).
- b. **S2.013** may operate **8,760** hours per calendar year.

4. NAC 445B.3405

a. Monitoring, Testing and Record keeping

Upon commencement of operations, *Permittee will*:

- (1) Monitor and record the loading rate of coal to **S2.013** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.013** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **Transfer Tower's Fabric Filter** while **System 13** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **the Transfer Tower's Fabric Filter** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Section V. Specific Operating Conditions (continued)

M. Emission Unit S2.013 - Transfer Tower #2 (continued)

- 5. NAC 445B.3405
 - a. **NSPS Subpart Y Compliance Requirements -** *The Permittee* shall comply with 40 CFR Part 60, Subpart Y by complying with the following conditions:
 - (1) *The Permittee* shall submit a notification of the date construction of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form. (40 CFR §60.7(a)(1))
 - (2) *The Permittee* shall submit a notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date. (40 CFR §60.7(a)(3))
 - (3) *The Permittee* shall submit a notification of the anticipated date for conducting the opacity observations required by §60.11(e)(1). The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date. (40 §60.7(a)(6))
 - (4) *The Permittee* shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of **System 13**. (40 CFR §60.7(b))
 - (5) Compliance with NSPS Subpart Y opacity standards shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60 or any alternative method that is approved by the Administrator. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test. (40 CFR §60.11(b))
 - (6) Opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. *The Permittee* shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. (40 CFR §60.11(e)(1))
 - (7) Except as provided in **M.5.a.(8)** of this section, *the Permittee* shall conduct opacity observations in accordance with **M.5.a.(5)** of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results. The inability of *the Permittee* to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations. (40 CFR §60.11(e)(2))
 - (8) *The Permittee* may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. *The Permittee* shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the opacity testing notification required in §60.7(a)(6). (40 CFR §60.11(e)(3))

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Section V. Specific Operating Conditions (continued)

N. Emission Unit S2.014 - Coal Crusher Building

UTM: North 4,375.264 km, East 690.018 km (Zone 11)

Coal Crusher Building System 14

S2.014 **Coal Crusher Building**

1. NAC 445B.3405

Air Pollution Control Equipment

Emissions from **S2.014** shall be ducted to a control system consisting of a **Fabric Filter** with 100% capture and a maximum volume flow rate of 23,000 dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - Determination of Stack Gas Velocity and Volumetric Flow Rate as referenced in 40 CFR Part 60, Appendix A.

b. Nominal Stack Parameters

Height: 120.0 ft Diameter: 3.0 ft Exhaust Temperature: 68 °F Velocity: 56.55 ft/sec Volume Flow: 23,000 DSCFM

2. NAC 445B.3405

- a. On and after the date of startup of **S2.014**, the Permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of the Coal Crusher Building, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.99** pound per hour, based on a 3-hour averaging period. This limit is less than the 90.62 pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by N.3.a of this section.
 - (2) NAC 445B.305 The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.99** pound per hour, based on a 3-hour averaging period. This limit is less than the **90.62** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by **N.3.a** of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of the Crusher Building Fabric Filter will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of PM_{10} to the atmosphere from the exhaust stack of the Crusher Building Fabric Filter will not exceed 0.005 grain per dry standard cubic foot, based on a 3-hour averaging
- b. New Source Performance Standards Subpart Y Standards of Performance for Coal Preparation Plants (40 CFR Part 60.250) On and after the sixtieth day after achieving the maximum production rate at which **S2.014** will be operated, but not later than 180 days after initial startup, the Permittee will not discharge or cause the discharge into the atmosphere from **S2.014** the following pollutants in excess of the following specified limits:
 - (1) Emissions that exhibit equal to or greater than 20 percent opacity (40 CFR Part 60.252(c))
 - (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c))
 - (3) At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate \$2.014 including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d))

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CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

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Section V. Specific Operating Conditions (continued)

N. Emission Unit S2.014 - Coal Crusher Building (continued)

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for **S2.014** will not exceed **2,600.0** tons of coal per any one-hour period (1,300 tons per hour from each transfer conveyor).
- b. **S2.014** may operate **8,760** hours per calendar year.
- 4. NAC 445B.3405
 - a. Monitoring, Testing and Record keeping

Upon commencement of operations, Permittee will:

- (1) Monitor and record the loading rate of coal to **S2.014** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.014** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **Crusher Building Fabric Filter** while **System 14** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **Crusher Building Fabric Filter** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Section V. Specific Operating Conditions (continued)

N. Emission Unit S2.014 - Coal Crusher Building (continued)

5. NAC 445B.3405

- a. **NSPS Subpart Y Compliance Requirements** *The Permittee* shall comply with 40 CFR Part 60, Subpart Y by complying with the following conditions:
 - (1) *The Permittee* shall submit a notification of the date construction of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form. (40 CFR §60.7(a)(1))
 - (2) *The Permittee* shall submit a notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date. (40 CFR §60.7(a)(3))
 - (3) *The Permittee* shall submit a notification of the anticipated date for conducting the opacity observations required by §60.11(e)(1). The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date. (40 §60.7(a)(6))
 - (4) *The Permittee* shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of **System 14**. (40 CFR §60.7(b))
 - (5) Compliance with NSPS Subpart Y opacity standards shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60 or any alternative method that is approved by the Administrator. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test. (40 CFR §60.11(b))
 - (6) Opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. *The Permittee* shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. (40 CFR §60.11(e)(1))
 - (7) Except as provided in **N.5.a.(8)** of this section, *the Permittee* shall conduct opacity observations in accordance with **N.5.a.(5)** of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results. The inability of *the Permittee* to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations. (40 CFR §60.11(e)(2))
 - (8) *The Permittee* may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. *The Permittee* shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the opacity testing notification required in §60.7(a)(6). (40 CFR §60.11(e)(3))

BUREAU OF AIR POLLUTION CONTROL

Facility ID No. A0765

Permit No. AP4911-2241

CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

Issued to: SIERRA PACIFIC RESOURCES COMPANY, ELY ENERGY CENTER, as Permittee

Section V. Specific Operating Conditions (continued)

O. Emission Unit S2.015 - Transfer Tower #3.

UTM: North 4,374.602 km, East 690.020 km (Zone 11)

System 15 Transfer Tower #3

S2.015 Transfer Tower #3

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.015** shall be ducted to a control system consisting of a **Fabric Filter** with 100% capture and a maximum volume flow rate of **21,000** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

b. Nominal Stack Parameters

Height: 200.0 ft
Diameter: 2.85 ft
Exhaust Temperature: 68 °F
Velocity: 51.66 ft/sec
Volume Flow: 21,000 DSCFM

2. NAC 445B.3405

- a. On and after the date of startup of **S2.015**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **the Transfer Tower #3**, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.9** pound per hour, based on a 3-hour averaging period. This limit is less than the **90.62** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by **0.3.a** of this section.
 - (2) NAC 445B.305 The discharge of **PM**₁₀ (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.9** pound per hour, based on a 3-hour averaging period. This limit is less than the **90.62** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by **0.3.a** of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **the Transfer Tower Fabric Filter** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the exhaust stack of **the Transfer Tower Fabric Filter** will not exceed **0.005** grain per dry standard cubic foot, based on a 3-hour averaging period.
- b. New Source Performance Standards Subpart Y Standards of Performance for Coal Preparation Plants (40 CFR Part 60.250) On and after the sixtieth day after achieving the maximum production rate at which **S2.015** will be operated, but not later than 180 days after initial startup, *the Permittee* will not discharge or cause the discharge into the atmosphere from **S2.015** the following pollutants in excess of the following specified limits:
 - (1) Emissions that exhibit equal to or greater than 20 percent opacity (40 CFR Part 60.252(c))
 - (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c))
 - (3) At all times, including periods of startup, shutdown, and malfunction, *the Permittee* shall, to the extent practicable, maintain and operate **S2.015** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d))

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Facility ID No. A0765

Permit No. AP4911-2241

CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

Issued to: SIERRA PACIFIC RESOURCES COMPANY, ELY ENERGY CENTER, as Permittee

Section V. Specific Operating Conditions (continued)

O. Emission Unit S2.015 - Transfer Tower#3 (continued)

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for **S2.015** will not exceed **2,600.0** tons of coal per any one-hour period (1,300 tons per hour from each coal feed conveyor at the crushing building).
- b. **S2.015** may operate **8,760** hours per calendar year.

4. NAC 445B.3405

a. Monitoring, Testing and Record keeping

- (1) Monitor and record the loading rate of coal to **S2.015** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.015** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **Transfer Tower Fabric Filter** while **System 15** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **Transfer Tower Fabric Filter** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

Issued to: SIERRA PACIFIC RESOURCES COMPANY, ELY ENERGY CENTER, as Permittee

Section V. Specific Operating Conditions (continued)

O. Emission Unit S2.015 - Transfer Tower#3 (continued)

5. NAC 445B.3405

- a. **NSPS Subpart Y Compliance Requirements -** *The Permittee* shall comply with 40 CFR Part 60, Subpart Y by complying with the following conditions:
 - (1) *The Permittee* shall submit a notification of the date construction of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form. (40 CFR §60.7(a)(1))
 - (2) *The Permittee* shall submit a notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date. (40 CFR §60.7(a)(3))
 - (3) *The Permittee* shall submit a notification of the anticipated date for conducting the opacity observations required by §60.11(e)(1). The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date. (40 §60.7(a)(6))
 - (4) *The Permittee* shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of **System 15**. (40 CFR §60.7(b))
 - (5) Compliance with NSPS Subpart Y opacity standards shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60 or any alternative method that is approved by the Administrator. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test. (40 CFR §60.11(b))
 - (6) Opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. *The Permittee* shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. (40 CFR §60.11(e)(1))
 - (7) Except as provided in **O.5.a.(8)** of this section, *the Permittee* shall conduct opacity observations in accordance with **O.5.a.(5)** of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results. The inability of *the Permittee* to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations. (40 CFR §60.11(e)(2))
 - (8) *The Permittee* may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. *The Permittee* shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the opacity testing notification required in §60.7(a)(6). (40 CFR §60.11(e)(3))

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CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

Issued to: SIERRA PACIFIC RESOURCES COMPANY, ELY ENERGY CENTER, as Permittee

Section V. Specific Operating Conditions (continued)

P. Emission Units S2.016 and S2.017 - Coal Silo #1

UTM: North 4,375.264 km, East 690.018 km (Zone 11) UTM: North 4,375.264 km, East 690.018 km (Zone 11)

System 16 Coal Silo #1

S2.016 Coal Silo#1 (tripper floor dust collector A)
S2.017 Coal Silo#1 (tripper floor dust collectors B)

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.016** and **S2.017** shall be ducted to a control system consisting of two **Fabric Filters** (Tripper Floor Dust Collectors A & B) with 100% capture and a maximum volume flow rate of **23,000** dry standard cubic feet per minute (dscfm) each. The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

b. Nominal Stack Parameters for each dust collector

Height: 120.0 ft
Diameter: 3.0 ft
Exhaust Temperature: 68 °F
Velocity: 56.5 ft/sec
Volume Flow: 23.000 DSCFM

2. NAC 445B.3405

- a. On and after the date of startup of **S2.016** and **S2.017**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **each dust collector**, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.99** pound per hour, **each**, based on a 3-hour averaging period. This limit is less than the **90.62** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by **O.3.a** of this section.
 - (2) NAC 445B.305 The discharge of **PM**₁₀ (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.99** pound per hour, **each**, based on a 3-hour averaging period. This limit is less than the **90.62** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by **0.3.a** of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **the Coal Silo #1 Fabric Filters** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the exhaust stack of **the Coal Silo Fabric Filters** will not exceed **0.005** grain per dry standard cubic foot, based on a 3-hour averaging period.
- b. New Source Performance Standards Subpart Y Standards of Performance for Coal Preparation Plants (40 CFR Part 60.250) On and after the sixtieth day after achieving the maximum production rate at which **S2.016 and S2.017** will be operated, but not later than 180 days after initial startup, *the Permittee* will not discharge or cause the discharge into the atmosphere from **S2.016 and S2.017** the following pollutants in excess of the following specified limits:
 - (1) Emissions that exhibit equal to or greater than 20 percent opacity (40 CFR Part 60.252(c))
 - (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c))
 - (3) At all times, including periods of startup, shutdown, and malfunction, *the Permittee* shall, to the extent practicable, maintain and operate **S2.016** and **S2.017** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d))

BUREAU OF AIR POLLUTION CONTROL

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Permit No. AP4911-2241

CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

Issued to: SIERRA PACIFIC RESOURCES COMPANY, ELY ENERGY CENTER, as Permittee

Section V. Specific Operating Conditions (continued)

P. Emission Unit S2.016 and S2.017 - Coal Silo #1 (continued)

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for **S2.016 and S2.017** will not exceed **2,600.0** tons of coal per any one-hour period (1,300 tons per hour from each tripper conveyor from the Transfer Tower #3).
- b. **S2.016 and S2.017** may operate **8,760** hours per calendar year.

4. NAC 445B.3405

a. Monitoring, Testing and Record keeping

- (1) Monitor and record the loading rate of coal to **S2.016 and S2.017** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.016 and S2.017** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **Coal Silo Fabric Filters** while **System 16** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **Coal Silo Fabric Filters** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Section V. Specific Operating Conditions (continued)

- P. Emission Unit S2.016 and S2.017- Coal Silo #1 (continued)
 - 5. NAC 445B.3405
 - a. **NSPS Subpart Y Compliance Requirements** *The Permittee* shall comply with 40 CFR Part 60, Subpart Y by complying with the following conditions:
 - (1) *The Permittee* shall submit a notification of the date construction of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form. (40 CFR §60.7(a)(1))
 - (2) *The Permittee* shall submit a notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date. (40 CFR §60.7(a)(3))
 - (3) *The Permittee* shall submit a notification of the anticipated date for conducting the opacity observations required by §60.11(e)(1). The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date. (40 §60.7(a)(6))
 - (4) *The Permittee* shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of **System 16**. (40 CFR §60.7(b))
 - (5) Compliance with NSPS Subpart Y opacity standards shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60 or any alternative method that is approved by the Administrator. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test. (40 CFR §60.11(b))
 - (6) Opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. *The Permittee* shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. (40 CFR §60.11(e)(1))
 - (7) Except as provided in **P.5.a.(8)** of this section, *the Permittee* shall conduct opacity observations in accordance with **P.5.a.(5)** of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results. The inability of *the Permittee* to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations. (40 CFR §60.11(e)(2))
 - (8) *The Permittee* may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. *The Permittee* shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the opacity testing notification required in §60.7(a)(6). (40 CFR §60.11(e)(3))

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CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

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Section V. Specific Operating Conditions (continued)

O. Emission Units S2.018 and S2.019 - Coal Silo #2

UTM: North 4,375.264 km, East 690.018 km (Zone 11) UTM: North 4,375.264 km, East 690.018 km (Zone 11)

System 17 Coal Silo #2

S2.018 Coal Silo#2 (tripper floor dust collector A)
S2.019 Coal Silo#2 (tripper floor dust collectors B)

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.018** and **S2.019** shall be ducted to a control system consisting of two **Fabric Filters** (Tripper Floor Dust Collectors) with 100% capture and a maximum volume flow rate of **23,000** dry standard cubic feet per minute (dscfm), each. The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

b. Nominal Stack Parameters for each dust collector

Height: 120.0 ft
Diameter: 3.0 ft
Exhaust Temperature: 68 °F
Velocity: 56.5 ft/sec
Volume Flow: 23.000 DSCFM

2. NAC 445B.3405

- a. On and after the date of startup of **S2.018** and **S2.019**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **the dust collectors**, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.99** pound per hour, each, based on a 3-hour averaging period. This limit is less than the **90.62** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by **Q.3.a** of this section.
 - (2) NAC 445B.305 The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed 0.99 pound per hour, each, based on a 3-hour averaging period. This limit is less than the 90.62 pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by 0.3.a of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **the Coal Silo #2 Fabric Filters** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the exhaust stack of **the Coal Silo Fabric Filters** will not exceed **0.005** grain per dry standard cubic foot, based on a 3-hour averaging period.
- b. New Source Performance Standards Subpart Y Standards of Performance for Coal Preparation Plants (40 CFR Part 60.250) On and after the sixtieth day after achieving the maximum production rate at which **S2.018 and \$2.019** will be operated, but not later than 180 days after initial startup, *the Permittee* will not discharge or cause the discharge into the atmosphere from **S2.018 and S2.019** the following pollutants in excess of the following specified limits:
 - (1) Emissions that exhibit equal to or greater than 20 percent opacity (40 CFR Part 60.252(c))
 - (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c))
 - (3) At all times, including periods of startup, shutdown, and malfunction, *the Permittee* shall, to the extent practicable, maintain and operate **S2.018** and **S2.019** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d))

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Permit No. AP4911-2241

CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

Issued to: SIERRA PACIFIC RESOURCES COMPANY, ELY ENERGY CENTER, as Permittee

Section V. Specific Operating Conditions (continued)

Q. Emission Unit S2.018 and S2.019 - Coal Silo #2 (continued)

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for **S2.018 and S2.019** will not exceed **2,600.0** tons of coal per any one-hour period (1,300 tons per hour from each tripper conveyor from the Transfer Tower #3).
- b. **S2.018 and S2.019** may operate **8,760** hours per calendar year.
- 4. NAC 445B.3405
 - a. Monitoring, Testing and Record keeping

- (1) Monitor and record the loading rate of coal to **S2.018** and **S2.019** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.018 and S2.019** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **Coal Silo Fabric Filter** while **System 17** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **Coal Silo Fabric Filters** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

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Section V. Specific Operating Conditions (continued)

Q. Emission Unit S2.018 and S2.019 - Coal Silo #2 (continued)

5. NAC 445B.3405

- a. **NSPS Subpart Y Compliance Requirements** *The Permittee* shall comply with 40 CFR Part 60, Subpart Y by complying with the following conditions:
 - (1) *The Permittee* shall submit a notification of the date construction of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form. (40 CFR §60.7(a)(1))
 - (2) *The Permittee* shall submit a notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date. (40 CFR §60.7(a)(3))
 - (3) *The Permittee* shall submit a notification of the anticipated date for conducting the opacity observations required by §60.11(e)(1). The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date. (40 §60.7(a)(6))
 - (4) *The Permittee* shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of **System 17**. (40 CFR §60.7(b))
 - (5) Compliance with NSPS Subpart Y opacity standards shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60 or any alternative method that is approved by the Administrator. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test. (40 CFR §60.11(b))
 - (6) Opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. *The Permittee* shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. (40 CFR §60.11(e)(1))
 - (7) Except as provided in **Q.5.a.(8)** of this section, *the Permittee* shall conduct opacity observations in accordance with **Q.5.a.(5)** of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results. The inability of *the Permittee* to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations. (40 CFR §60.11(e)(2))
 - (8) *The Permittee* may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. *The Permittee* shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the opacity testing notification required in §60.7(a)(6). (40 CFR §60.11(e)(3))

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CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

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Section V. Specific Operating Conditions (continued)

R. Emission Units S2.020 - Limestone Unloading Building

UTM: North 4,375.027 km, East 690.143 km (Zone 11)

ing

S2.020 Limestone Unloading Building PF1.003 Limestone Conveyor Transfer Point

PF1.004 Limestone Pile

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.020** shall be ducted to a control system consisting of a **Fabric Filter** with 100% capture and a maximum volume flow rate of **75,000** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

b. Nominal Stack Parameters

Height: 6.0 ft
Diameter: 5.0 ft
Exhaust Temperature: 68 °F
Velocity: 63.6 ft/sec
Volume Flow: 75.000 DSCFM

c. Emissions from **PF1.003** and **PF1.004** shall be controlled by material conditioning and dust suppression sprays if necessary.

2. NAC 445B.3405

- a. On and after the date of startup of **S2.020**, **PF1.003** and **PF1.004**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **the Limestone Unloading Building**, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) from **S2.020** to the atmosphere will not exceed **3.21** pound per hour, based on a 3-hour averaging period. This limit is less than the **71.16** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by **R.3.a** of this section.
 - (2) NAC 445B.305 The discharge of **PM**₁₀ (particulate matter less than 10 microns in diameter) from **S2.020** to the atmosphere will not exceed **3.21** pound per hour, based on a 3-hour averaging period. This limit is less than the **71.16** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by **R.3.a** of this section.
 - (3) NAC 445B.305 The discharge of **PM** (particulate matter) **PF1.003** to the atmosphere will not exceed **0.122** pound per hour, based on a 3-hour averaging period. This limit is less than the **71.16** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by **R.3.a** of this section.
 - (4) NAC 445B.305 The discharge of **PM**₁₀ (particulate matter less than 10 microns in diameter) **PF1.003** to the atmosphere will not exceed **0.122** pound per hour, based on a 3-hour averaging period. This limit is less than the **71.16** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by **R.3.a** of this section.
 - (5) NAC 445B.305 The discharge of **PM** (particulate matter) **PF1.004** to the atmosphere will not exceed **1.39** pound per hour, based on a 3-hour averaging period. This limit is less than the **71.16** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by **R.3.a** of this section.

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Permit No. AP4911-2241

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Section V. Specific Operating Conditions (continued)

R. Emission Unit S2.020 - Limestone Preparation Building (continued)

- (6) NAC 445B.305 The discharge of **PM**₁₀ (particulate matter less than 10 microns in diameter) **PF1.004** to the atmosphere will not exceed **1.39** pound per hour, based on a 3-hour averaging period. This limit is less than the **71.16** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by **R.3.a** of this section.
- (7) NAC 445B.22017 The opacity from the exhaust stack of **the Fabric Filter, PF1.003 and PF1.004** will not equal or exceed 20% in accordance with NAC 445B.22017.
- (8) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the exhaust stack of **the Fabric Filter** will not exceed **0.005** grain per dry standard cubic foot, based on a 3-hour averaging period.

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for **S2.020**, **PF1.003** and **PF1.004** will not exceed **600.0** tons of limestone per any one-hour period.
- b. S2.020, PF1.003 and PF1.004 may operate 8,760 hours per calendar year.

4. NAC 445B.3405

a. Monitoring, Testing and Record keeping

- (1) Monitor and record the loading rate of limestone to **S2.020** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.020** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **the Fabric Filter, PF1.003 and PF1.004** while **System 18** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **the Fabric Filter** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Section V. Specific Operating Conditions (continued)

S. Emission Units S2.021 - Limestone Reclaim Hoppers and Tunnel

UTM: North 4,374.890 km, East 690.108 km (Zone 11)

System 19 Limestone Hoppers and Tunnel

S2.021 Limestone Hoppers and Tunnel

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.021** shall be ducted to a control system consisting of a **Fabric Filter** with 100% capture and a maximum volume flow rate of **4,125** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

b. Nominal Stack Parameters

Height: 6.0 ft
Diameter: 1.25 ft
Exhaust Temperature: 68 °F
Velocity: 71.8 ft/sec
Volume Flow: 4,125 DSCFM

2. NAC 445B.3405

- a. On and after the date of startup of **S2.019**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **the Reclaim Hoppers and Tunnel**, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.177** pound per hour, based on a 3-hour averaging period. This limit is less than the **71.16** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by **S.3.a** of this section.
 - (2) NAC 445B.305 The discharge of **PM**₁₀ (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.177** pound per hour, based on a 3-hour averaging period. This limit is less than the **71.16** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by **S.3.a** of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **Fabric Filter** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the exhaust stack of **the Fabric Filter** will not exceed **0.005** grain per dry standard cubic foot, based on a 3-hour averaging period.

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Section V. Specific Operating Conditions (continued)

S. Emission Unit S2.021 - Limestone Reclaim Hoppers and Tunnel (continued)

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for \$2.021 will not exceed 600.0 tons of limestone per any one-hour period.
- b. **S2.021** may operate **8,760** hours per calendar year.

4. NAC 445B.3405

a. Monitoring, Testing and Record keeping

- (1) Monitor and record the loading rate of limestone to **S2.021** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.021** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **the Fabric Filter** while **System 19** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **the Fabric Filter** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Section V. Specific Operating Conditions (continued)

T. Emission Units S2.022 - Limestone Preparation Building

UTM: North 4,374.864 km, East 690.108 km (Zone 11)

System 20 Limestone Preparation Building

S2.022 Limestone Preparation Building

PF1.005 Limestone Conveyor Transfer to Limestone Preparation Building

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.022** shall be ducted to a control system consisting of a **Fabric Filter** with 100% capture and a maximum volume flow rate of **4,000** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

b. Nominal Stack Parameters

Height: 80.0 ft
Diameter: 1.25 ft
Exhaust Temperature: 68 °F
Velocity: 54.3 ft/sec
Volume Flow: 4,000 DSCFM

c. Emissions from **PF1.005** shall be controlled by material conditioning and dust suppression sprays if necessary.

2. NAC 445B.3405

- a. On and after the date of startup of **S2.022 and PF1.005**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **the Limestone Preparation Building**, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.171** pound per hour, based on a 3-hour averaging period. This limit is less than the **71.16** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by **T3.a** of this section.
 - (2) NAC 445B.305 The discharge of PM₁₀ (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.171** pound per hour, based on a 3-hour averaging period. This limit is less than the **71.16** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by **T.3.a** of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **Fabric Filter and PF1.005** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the exhaust stack of **the Fabric Filter** will not exceed **0.005** grain per dry standard cubic foot, based on a 3-hour averaging period.

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Section V. Specific Operating Conditions (continued)

- T. Emission Unit S2.022 Limestone Preparation Building (continued)
 - 3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for **S2.022 and PF1.005 will** not exceed **600.0** tons of limestone per any one-hour period.
- b. **S2.022 and PF1.005 may** operate **8,760** hours per calendar year.
- 4. NAC 445B.3405
 - a. Monitoring, Testing and Record keeping

- (1) Monitor and record the loading rate of limestone to **S2.022** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.020** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **the Fabric Filter and PF1.005** while **System 20** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **the Fabric Filter** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Section V. Specific Operating Conditions (continued)

U. Emission Units S2.023 - Limestone Silo A

UTM: North 4,374.864 km, East 690.108 km (Zone 11)

System 21 Limestone Silo A

S2.023 Limestone Silo A

PF1.006 Limestone Conveyor Transfer Point to Silo A

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.023**1shall be ducted to a control system consisting of a **Bin Vent Filter** with 100% capture and a maximum volume flow rate of **700** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

b. Nominal Stack Parameters

Height: 80.0 ft
Diameter: 0.52 ft
Exhaust Temperature: 68 °F
Velocity: 58.2 ft/sec
Volume Flow: 700 DSCFM

c. Emissions from **PF1.006** shall be controlled by material conditioning and dust suppression sprays if necessary.

2. NAC 445B.3405

- a. On and after the date of startup of **S2.023 and PF1.006**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **the Limestone Silo A**, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) from **S2.023** to the atmosphere will not exceed **0.06** pound per hour, based on a 3-hour averaging period. This limit is less than the **71.16** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by **U3.a** of this section.
 - (2) NAC 445B.305 The discharge of **PM**₁₀ (particulate matter less than 10 microns in diameter) from **S2.023** to the atmosphere will not exceed **0.06** pound per hour, based on a 3-hour averaging period. This limit is less than the **71.16** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by **U.3.a** of this section.
 - (3) NAC 445B.305 The discharge of **PM** (particulate matter) **from PF1.006** to the atmosphere will not exceed **0.039** pound per hour, based on a 3-hour averaging period. This limit is less than the **71.16** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by **U3.a** of this section.
 - (4) NAC 445B.305 The discharge of PM_{10} (particulate matter less than 10 microns in diameter) from PF1.006 to the atmosphere will not exceed 0.039 pound per hour, based on a 3-hour averaging period. This limit is less than the 71.16 pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by U.3.a of this section.
 - (5) NAC 445B.22017 The opacity from the exhaust stack of **Vent Fabric Filter and PF1.006** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (6) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the exhaust stack of **the Vent Fabric Filter** will not exceed **0.01** grain per dry standard cubic foot, based on a 3-hour averaging period.

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Section V. Specific Operating Conditions (continued)

U. Emission Unit S2.023 - Limestone Silo A (continued)

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for **S2.023 and PF1.006** will not exceed **600.0** tons of limestone per any one-hour period.
- b. **S2.023 and PF1.006** may operate **8,760** hours per calendar year.
- 4. NAC 445B.3405
 - a. Monitoring, Testing and Record keeping

- (1) Monitor and record the loading rate of limestone to **S2.023** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.023** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **the Vent Filter and PF1.006** while **System 21** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **the Vent Fabric Filter** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Section V. Specific Operating Conditions (continued)

V. Emission Units S2.024 - Limestone Silo B

UTM: North 4,374.864 km, East 690.108 km (Zone 11)

System 22 Limestone Silo B

S2.024 Limestone Silo B

PF1.007 Limestone Conveyor Transfer Point to Silo B

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.024** shall be ducted to a control system consisting of a **Bin Vent Filter** with 100% capture and a maximum volume flow rate of **700** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

b. Nominal Stack Parameters

Height: 80.0 ft
Diameter: 0.52 ft
Exhaust Temperature: 68 °F
Velocity: 58.2 ft/sec
Volume Flow: 700 DSCFM

c. Emissions from **PF1.007** shall be controlled by material conditioning and dust suppression sprays if necessary.

2. NAC 445B.3405

- a. On and after the date of startup of **S2.024** and **PF1.007**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **the Limestone Silo A**, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.06** pound per hour, based on a 3-hour averaging period. This limit is less than the **71.16** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by **V3.a** of this section.
 - (2) NAC 445B.305 The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed 0.06 pound per hour, based on a 3-hour averaging period. This limit is less than the 71.16 pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by V.3.a of this section.
 - (3) NAC 445B.305 The discharge of **PM** (particulate matter) **from PF1.007** to the atmosphere will not exceed **0.039** pound per hour, based on a 3-hour averaging period. This limit is less than the **71.16** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by **V3.a** of this section.
 - (4) NAC 445B.305 The discharge of **PM**₁₀ (particulate matter less than 10 microns in diameter) **from PF1.007** to the atmosphere will not exceed **0.039** pound per hour, based on a 3-hour averaging period. This limit is less than the **71.16** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by **V.3.a** of this section.
 - (5) NAC 445B.22017 The opacity from the exhaust stack of **Bin Vent Filter and PF1.007** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (6) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the exhaust stack of **the Vent Fabric Filter** will not exceed **0.01** grain per dry standard cubic foot, based on a 3-hour averaging period.

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Section V. Specific Operating Conditions (continued)

V. Emission Unit S2.024 - Limestone Silo B (continued)

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for **S2.024 and PF1.007** will not exceed **600.0** tons of limestone per any one-hour period.
- b. **S2.024 and PF1.007** may operate **8,760** hours per calendar year.
- 4. NAC 445B.3405
 - a. Monitoring, Testing and Record keeping

- (1) Monitor and record the loading rate of limestone to **S2.024** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.024** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **the Bin Vent Filter and PF1.007** while **System 22** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **the Bin Vent Filter** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Section V. Specific Operating Conditions (continued)

W. Emission Units PF1.008 - Gypsum Stockout Conveyor

UTM: North 4,374.942 km, East 690.066 km (Zone 11)

System 23 Gypsum Stockout Conveyor Transfer Point

PF1.008 Gypsum Stockout Conveyor Transfer Point

1. NAC 445B.3405

Air Pollution Control Equipment

Emissions from **PF1.008** shall be controlled by material conditioning and dust suppression sprays if necessary.

2. NAC 445B.3405

Emission Limits

- a. On and after the date of startup of **PF1.007**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **the Gypsum Stockout Conveyor**, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.113** pound per hour, based on a 3-hour averaging period. This limit is less than the **66.31** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by **W3.a** of this section.
 - (2) NAC 445B.305 The discharge of PM₁₀ (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.113** pound per hour, based on a 3-hour averaging period. This limit is less than the **66.31** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by W.3.a of this section.
 - (3) NAC 445B.22017 The opacity from the **Gypsum Stockout Conveyor Transfer Point** will not equal or exceed 20% in accordance with NAC 445B.22017.

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for PF1.008 will not exceed 400.0 tons of gypsum per any one-hour period.
- b. **PF1.008** may operate **8,760** hours per calendar year.

4. NAC 445B.3405

a. Monitoring, Testing and Record keeping

- (1) Monitor and record the loading rate of Gypsum to **F1.008** on a daily basis.
- (2) Monitor and record the hours of operation of **F1.008** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the *Gypsum Stockout Conveyor Transfer Point while*System 23 is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.

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Section V. Specific Operating Conditions (continued)

X. Emission Unit S2.024 - Fly Ash Silo #1

UTM: North 4,374.998 km, East 690.177 km (Zone 11)

System 24 Fly Ash Silo #1 Operations

S2.025 Fly Ash Silo #1

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.025** shall be ducted to a control system consisting of a **Bin Vent Filter** with 100% capture and a maximum volume flow rate of **1,000** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

b. Nominal Stack Parameters

Stack Height: 100.0 ft
Stack Diameter: 0.62 ft
Stack Velocity: 48 ft/sec
Stack Temperature: 125 °F
Volume Flow Rate: 1,000 dscfm

2. NAC 445B.3405

- a. On and after the date of startup of **S2.025**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **the Fly Ash Silo Bin Vent Filter**, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.086** pound per hour, based on a 3-hour averaging period. This limit is less than the **46.29** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by **X.3.a** of this section.
 - (2) NAC 445B.305 The discharge of **PM**₁₀ (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.086** pound per hour, based on a 3-hour averaging period. This limit is less than the **46.29** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by **X.3.a** of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **the Fly Ash Silo Bin Vent Filter** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the exhaust stack of **the Fly Ash Silo Bin Vent Filter** will not exceed **0.01** grain per dry standard cubic foot, based on a 3-hour averaging period.

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Section V. Specific Operating Conditions (continued)

X. Emission Unit S2.025 - Fly Ash Silo #1 (continued)

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for \$2.025 will not exceed 60 tons of fly ash per any one-hour period.
- b. **S2.025** may operate **8,760** hours per calendar year.
- 4. NAC 445B.3405
 - a. Monitoring, Testing and Record keeping

- (1) Monitor and record the loading rate of fly ash to **S2.025** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.025** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **the Fly Ash Silo Bin Vent Filter** while **System 24** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **the Fly Ash Silo Bin Vent Filter** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Section V. Specific Operating Conditions (continued)

Y. Emission Unit S2.026 - Fly Ash Silo #2

UTM: North 4,374.998 km, East 690.201 km (Zone 11)

System 25 Fly Ash Silo #2 Operations

S2.026 Fly Ash Silo #2

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.026** shall be ducted to a control system consisting of a **Bin Vent Filter** with 100% capture and a maximum volume flow rate of **1,000** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

b. Nominal Stack Parameters

Stack Height: 100.0 ft
Stack Diameter: 0.62 ft
Stack Velocity: 48 ft/sec
Stack Temperature: 125 °F
Volume Flow Rate: 1,000 dscfm

2. NAC 445B.3405

- a. On and after the date of startup of **S2.026**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **the Fly Ash Silo Bin Vent Filter**, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.086** pound per hour, based on a 3-hour averaging period. This limit is less than the **46.29** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by **Y.3.a** of this section.
 - (2) NAC 445B.305 The discharge of **PM**₁₀ (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.086** pound per hour, based on a 3-hour averaging period. This limit is less than the **46.29** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by **Y.3.a** of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **the Fly Ash Silo Bin Vent Filter** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the exhaust stack of **the Fly Ash Silo Bin Vent Filter** will not exceed **0.01** grain per dry standard cubic foot, based on a 3-hour averaging period.

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Section V. Specific Operating Conditions (continued)

Y. Emission Unit S2.026 - Fly Ash Silo #2 Operations (continued)

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for \$2.026 will not exceed 60 tons of fly ash per any one-hour period.
- b. **S2.026** may operate **8,760** hours per calendar year.
- 4. NAC 445B.3405
 - a. Monitoring, Testing and Record keeping

- (1) Monitor and record the loading rate of fly ash to **S2.026** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.026** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **the Fly Ash Silo Bin Vent Filter** while **System 25** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **the Fly Ash Silo Bin Vent Filter** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Section V. Specific Operating Conditions (continued)

Z. Emission Unit S2.027 - Bottom Ash Silo #1

UTM: North 4,374.693 km, East 690.026 km (Zone 11)

System 26 Bottom Ash Silo #1 Operations

S2.027 Bottom Ash Silo #1

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.027** shall be ducted to a control system consisting of a **Bin Vent Filter** with 100% capture and a maximum volume flow rate of **1,000** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

b. Nominal Stack Parameters

Stack Height: 100.0 ft
Stack Diameter: 0.62 ft
Stack Velocity: 48 ft/sec
Stack Temperature: 125 °F
Volume Flow Rate: 1,000 dscfm

2. NAC 445B.3405

- a. On and after the date of startup of S2.027, the Permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of the Bottom Ash Silo Bin Vent Filter, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.086** pound per hour, based on a 3-hour averaging period. This limit is less than the **56.57** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by **Z.3.a** of this section.
 - (2) NAC 445B.305 The discharge of **PM**₁₀ (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.086** pound per hour, based on a 3-hour averaging period. This limit is less than the **56.57** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by **Z.3.a** of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **the Bottom Ash Silo Bin Vent Filter** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of PM_{10} to the atmosphere from the exhaust stack of **the Bottom** Ash Silo Bin Vent Filter will not exceed **0.01** grain per dry standard cubic foot, based on a 3-hour averaging period.

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Section V. Specific Operating Conditions (continued)

Z. Emission Unit S2.027 - Bottom Ash Silo #1 (continued)

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for \$2.027 will not exceed 167.0 tons of bottom ash per any one-hour period.
- b. **S2.027** may operate **8,760** hours per calendar year.
- 4. NAC 445B.3405
 - a. Monitoring, Testing and Record keeping

- (1) Monitor and record the loading rate of fly ash to \$2.027 on a daily basis.
- (2) Monitor and record the hours of operation of **S2.027** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **the Bottom Ash Silo Bin Vent Filter** while **System 26** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **the Bottom Ash Silo Bin Vent Filter** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Section V. Specific Operating Conditions (continued)

AA. Emission Unit S2.028 - Bottom Ash Silo #2

UTM: North 4,374.693 km, East 690.118 km (Zone 11)

System 27 Bottom Ash Silo #2 Operations

S2.028 Bottom Ash Silo #2

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.028** shall be ducted to a control system consisting of a **Bin Vent Filter** with 100% capture and a maximum volume flow rate of **1,000** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

b. Nominal Stack Parameters

Stack Height: 100.0 ft
Stack Diameter: 0.62 ft
Stack Velocity: 48 ft/sec
Stack Temperature: 125 °F
Volume Flow Rate: 1,000 dscfm

2. NAC 445B.3405

- a. On and after the date of startup of S2.026, the Permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of the Bottom Ash Silo Bin Vent Filter, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.086** pound per hour, based on a 3-hour averaging period. This limit is less than the **56.57** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by **AA.3.a** of this section.
 - (2) NAC 445B.305 The discharge of PM₁₀ (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.086** pound per hour, based on a 3-hour averaging period. This limit is less than the **56.57** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by AA.3.a of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **the Bottom Ash Silo Bin Vent Filter** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the exhaust stack of **the Bottom Ash Silo Bin Vent Filter** will not exceed **0.01** grain per dry standard cubic foot, based on a 3-hour averaging period.

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Section V. Specific Operating Conditions (continued)

AA. Emission Unit S2.028 - Bottom Ash Silo #2 Operation (continued)

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for \$2.028 will not exceed 167.0 tons of bottom ash per any one-hour period.
- b. **S2.028** may operate **8,760** hours per calendar year.
- 4. NAC 445B.3405
 - a. Monitoring, Testing and Record keeping

- (1) Monitor and record the loading rate of fly ash to **S2.028** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.028** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **the Bottom Ash Silo Bin Vent Filter** while **System 27** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **the Bottom Ash Silo Bin Vent Filter** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Section V. Specific Operating Conditions (continued)

AB. Emission Units S2.029 and S2.030 - Dry Sorbent Storage Silo A& B for Boiler Units #1 and Unit #2

UTM: North 4,374.729 km, East 690.023 km and North 4,374.729 km, East 690.194km (Zone 11)

System 28	Dry Sorbent Storage Silo for Boiler Unit #1 and Unit #2
S2.029	Dry Sorbent Storage Silo for Boiler Unit #1
S2.030	Dry Sorbent Storage Silo for Boiler Unit #2

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.029** and **S2.030** shall be ducted to control systems consisting of two **Fabric Filters** with 100% capture and a maximum volume flow rate of **600** dry standard cubic feet per minute (dscfm), each. The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

b. Nominal Stack Parameters for each Fabric Filter

Stack Height: 75 ft
Stack Diameter: 0.5 ft
Stack Velocity: 50 ft/sec
Stack Temperature: 68 °F
Volume Flow Rate: 600 dscfm

2. NAC 445B.3405

- a. On and after the date of startup of S2.029 and S2.030, the Permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of each Fabric Filter, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.051** pound per hour, each, based on a 3-hour averaging period from each stack. This limit is less than the **51.28** pounds per hour maximum allowable emission limit for each stack as determined from NAC 445.732 and the maximum allowable throughput as limited by **AB.3.a** of this section.
 - (2) NAC 445B.305 The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed 0.051 pound per hour for each stack, based on a 3-hour averaging period. This limit is less than the 51.28 pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by AB.3.a of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **each Fabric Filter** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the exhaust stack of **each Fabric Filter** will not exceed **0.01** grain per dry standard cubic foot, based on a 3-hour averaging period.

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Section V. Specific Operating Conditions (continued)

AB. Emission Unit s S2.029 and S2.030 - Dry Sorbent Storage Silo A& B for Boiler Units #1 and Unit #2 (continued)

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for \$2.029 and \$2.030 will not exceed 100 tons of lime per any one-hour period, each.
- b. **S2.029 and S2.030** may operate **8,760** hours per calendar year, each.

4. NAC 445B.3405

a. Monitoring, Testing and Record keeping

- (1) Monitor and record the loading rate of lime to **S2.029 and S2.030** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.029 and S2.030** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **each Fabric Filter** while **System 28** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **each Fabric Filter** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Section V. Specific Operating Conditions (continued)

AC. Emission Unit S2.031- Soda Ash Storage Silo

UTM: North 4,374.733 km, East 689.892 km (Zone 11)

System 29 Soda Ash Storage Silo

S2.031 Soda Ash Silo

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.031** shall be ducted to a control system consisting of a **Bin Vent Filter** with 100% capture and a maximum volume flow rate of **600** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

b. Nominal Stack Parameters

Stack Height: 50 ft
Stack Diameter: 0.5 ft
Stack Velocity: 50 ft/sec
Stack Temperature: 68 °F
Volume Flow Rate: 600 dscfm

2. NAC 445B.3405

- a. On and after the date of startup of **S2.031**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **the Soda Ash Silo Bin Vent Filter**, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.051** pound per hour, based on a 3-hour averaging period. This limit is less than the **51.28** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by **AC.3.a** of this section.
 - (2) NAC 445B.305 The discharge of PM₁₀ (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.051** pound per hour, based on a 3-hour averaging period. This limit is less than the **51.28** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by AC.3.a of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **the Soda Ash Silo Bin Vent Filter** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the exhaust stack of **the Soda Ash Silo Bin Vent Filter** will not exceed **0.01** grain per dry standard cubic foot, based on a 3-hour averaging period.

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Section V. Specific Operating Conditions (continued)

AC. Emission Unit S2.031 - Soda Ash Silo (continued)

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for \$2.031 will not exceed 100 tons of soda ash per any one-hour period.
- b. **S2.031** may operate **8,760** hours per calendar year.

4. NAC 445B.3405

a. Monitoring, Testing and Record keeping

- (1) Monitor and record the loading rate of soda ash to **S2.031** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.031** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **the Soda Ash Silo Bin Vent Filter** while **System 29** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **the Soda Ash Silo Bin Vent Filter** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Section V. Specific Operating Conditions (continued)

AD. Emission Unit S2.032 - Magnesium Hydroxide Storage Silo

UTM: North 4,374.733 km, East 689.992 km (Zone 11)

System 30 Magnesium Hydroxide Storage Silo

S2.032 Magnesium Hydroxide Storage Silo

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.032** shall be ducted to a control system consisting of a **Bin Vent Filter** with 100% capture and a maximum volume flow rate of **600** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

b. Nominal Stack Parameters

Stack Height: 170.6 ft
Stack Diameter: 0.5 ft
Stack Velocity: 50 ft/sec
Stack Temperature: 68 °F
Volume Flow Rate: 600 dscfm

2. NAC 445B.3405

- a. On and after the date of startup of **S2.032**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **the Magnesium Hydroxide Silo Bin Vent Filter**, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.051** pound per hour, based on a 3-hour averaging period. This limit is less than the **51.28** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by **AD.3.a** of this section.
 - (2) NAC 445B.305 The discharge of **PM**₁₀ (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.051** pound per hour, based on a 3-hour averaging period. This limit is less than the **51.28** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by **AD.3.a** of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **the Magnesium Hydroxide Silo Bin Vent Filter** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the exhaust stack of **the Magnesium Hydroxide Silo Bin Vent Filter** will not exceed **0.01** grain per dry standard cubic foot, based on a 3-hour averaging period.

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Section V. Specific Operating Conditions (continued)

AD. Emission Unit S2.032 - Magnesium Hydroxide Storage Silo (continued)

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for \$2.032 will not exceed 100 tons of magnesium hydroxide per any one-hour period.
- b. **S2.032** may operate **8,760** hours per calendar year.
- 4. NAC 445B.3405
 - a. Monitoring, Testing and Record keeping

- (1) Monitor and record the loading rate of magnesium hydroxide to **S2.032** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.032** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **the Magnesium Hydroxide Silo Bin Vent Filter** while **System 30** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **the Magnesium Hydroxide Silo Bin Vent Filter** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Issued to: SIERRA PACIFIC RESOURCES COMPANY, ELY ENERGY CENTER, as Permittee

Section V. Specific Operating Conditions (continued)

AE. Emission Unit S2.033 - Lime Storage Silo

UTM: North 4,374.733 km, East 689.907 km (Zone 11)

System 31 Lime Storage Silo

S2.033 Lime Storage Silo

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.033** shall be ducted to a control system consisting of a **Bin Vent Filter** with 100% capture and a maximum volume flow rate of **600** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

b. Nominal Stack Parameters

Stack Height: 170.6 ft
Stack Diameter: 0.5 ft
Stack Velocity: 50 ft/sec
Stack Temperature: 68 °F
Volume Flow Rate: 600 dscfm

2. NAC 445B.3405

- a. On and after the date of startup of **S2.033**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **the Lime Silo Bin Vent Filter**, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.051** pound per hour, based on a 3-hour averaging period. This limit is less than the **51.28** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by **AE.3.a** of this section.
 - (2) NAC 445B.305 The discharge of **PM**₁₀ (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.051** pound per hour, based on a 3-hour averaging period. This limit is less than the **51.28** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by **AE.3.a** of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **the Lime Silo Bin Vent Filter** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the exhaust stack of **the Lime Silo Bin Vent Filter** will not exceed **0.01** grain per dry standard cubic foot, based on a 3-hour averaging period.

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Section V. Specific Operating Conditions (continued)

AE. Emission Unit S2.033 - Lime Storage Silo (continued)

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for \$2.033 will not exceed 100 tons of hydrated lime per any one-hour period.
- b. **S2.033** may operate **8,760** hours per calendar year.
- 4. NAC 445B.3405
 - a. Monitoring, Testing and Record keeping

- (1) Monitor and record the loading rate of hydrated lime to **S2.033** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.033** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **the Lime Silo Bin Vent Filter** while **System 31** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **the Lime Silo Bin Vent Filter** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Section V. Specific Operating Conditions (continued)

AF. Emission Units PF1.009 and PF1.0010 - Cooling Towers #1 and #2

UTM: North 4,374.247 km, East 689.742 km and North 4,374.244 km, East 690,383 km (Zone 11)

System 32 Cooling Tower System

PF1.009 Cooling Tower #1, manufactured by TBD PF1.010 Cooling Tower #2, manufactured by TBD

1. NAC 445B.3405

Air Pollution Equipment

Control system consisting of drift eliminators installed on **PF1.009** and **PF1.010** to reduce the cooling tower drift losses to the manufacturer's specification of 0.0005% or less.

b. Nominal Stack Parameters

Stack Height: 47 ft
Stack Diameter: 32.8 ft
Stack Velocity: 23.4 ft/sec
Stack Temperature: 52.5 °F
Volume Flow Rate: 19.813 dscfm

2. NAC 445B.3405

- a. On and after the date of startup of PF1.009 and PF1.010, the Permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of the Cooling Towers, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **6.26** pound per hour, eachbased on a 3-hour averaging period from each cooling tower. This limit is less than the **78.13** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by **AF.3.a** of this section.
 - (2) NAC 445B.305 The discharge of PM₁₀ (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **6.26** pound per hour, each, based on a 3-hour averaging period. This limit is less than the **78.13** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by AF.3.a of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **the Cooling Towers** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> Limit the cooling tower drift losses to the manufacturer's specification of 0.0005% or less.

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Section VI. Specific Operating Conditions (continued)

AF. Emission Units PF1.009 and PF1.0010 - Cooling Towers #1 and #2 (continued)

3. NAC 445B.3405

Operating Parameters

- a. The use of chromium-based water treatment chemicals in PF1.009 and PF1.010 is prohibited.
- b. **PF1.009 and PF1.010** may operate **8,760** hours per calendar year.
- c. The maximum circulating water flow rate for PF1.009 and PF1.010 will not exceed 250,000 gallons per minute, each.
- d. The maximum Total Dissolved Solids (TDS) content for **PF1.009** and **PF1.010** will not exceed **10,000** milligram per liter (10,000 ppm).

4. NAC 445B.3405

Monitoring, Recordkeeping and Compliance

The Permittee will maintain a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **PF1.009** and **PF1.010** are operating:

a. Monitoring

The Permittee, upon the issuance date of this operating permit will:

- (1) Sample the cooling tower water from **PF1.009 and PF1.010** on a calendar quarterly basis for the TDS concentration in parts per million (ppm). The TDS will be determined using EPA Method 160.1 DNS.
- (2) Monitor and record that the cooling tower drift eliminators for **PF1.001** and **PF1.002** are in-place and functional, on an annual basis. Inspection records must show that observations were made and include records of any corrective actions taken.

b. Recordkeeping

The Permittee will maintain a contemporaneous log containing at a minimum, the following recordkeeping for each day, or part of a day that **PF1.009** and **PF1.0010** are operating:

- (1) The TDS value of the circulating water of **PF1.009 and PF1.0010** on a calendar quarterly basis. The TDS value will be based on the sampling required in AF.4.a of this section.
- (2) The volume flow rate of the circulating water of **PF1.009** and **PF1.0010** on an hourly basis.
- (3) The total hourly quantities of water circulated for each hour of each day **PF1.009** and **PF1.0010** operate.
- (4) The total daily hours of operation of **PF1.009** and **PF1.0010** for the corresponding date.
- (5) Maintain manufacturer's guidelines for maintenance and inspection of the drift eliminators on site. Maintain annual inspection records including records of observations and any corrective actions taken.

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Section V. Specific Operating Conditions (continued)

AG. Emission Unit S2.034 - Fuel Storage Tank

UTM: North 4,375.099 km, East 689.995 km (Zone 11)

System 33 Distillate Fuel Storage Tank

S2.034 2,000,000 Gallon Ultra Low Sulfur Distillate Fuel Storage Tank

1. NAC 445B.3405

Air Pollution Control Equipment

S2.034 shall be controlled by a fixed roof and conservation vent valve(s).

S2.034 Tank Dimensions

Tank Height: 32 ft Tank Diameter: 104 ft

2. NAC 445B.3405

Emission Limits

On and after the date of startup of *S2.034*, *the Permittee* will not discharge or cause the discharge into the atmosphere from *S2.034*, the following pollutants in excess of the following specified limits:

- a. NAC 445B.305 The discharge of **VOC** to the atmosphere will not exceed **231.44** pounds per rolling 12-month averaging period.
- b. NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **VOC** to the atmosphere will not exceed **231.44** pounds per rolling 12-month averaging period.
- c. NAC 445B.22017 The opacity from **S2.034** will not equal or exceed **20**%. The opacity must be determined as set forth in 445B.22017.1(a) or (b).
- 3. NAC 445B.3405

Operating Parameters

- a. **S2.034** may store ultra low sulfur (0.0015% sulfur by weight) distillate fuel only.
- b. The maximum throughput will not exceed: 9,500,000 gallons per rolling 12-month period.
- c. **S2.034** may operate **8,760** hours per year.
- 4. NAC 445B.3405
 - a. Monitoring, Record keeping and Compliance

Upon commencement of operations, *the Permittee* will monitor and record in a contemporaneous log, the total distillate fuel throughput for **S2.034** on a monthly basis and calculate the rolling 12-month total.

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Section V. Specific Operating Conditions (continued)

AH.Emission Unit S2.035 - Fuel Storage Tank

UTM: North 4,373.602 km, East 689.030 km (Zone 11)

System 34 Distillate Fuel Storage Tank (Rail Power Refueling)

S2.035 1,00,000 Gallon Ultra Low Sulfur Distillate Fuel Storage Tank

1. NAC 445B.3405

Air Pollution Control Equipment

S2.035 shall be controlled by a fixed roof and conservation vent valve(s).

S2.035 Tank Dimensions

Tank Height: 32 ft Tank Diameter: 73 ft

2. NAC 445B.3405

Emission Limits

On and after the date of startup of *S2.035*, *the Permittee* will not discharge or cause the discharge into the atmosphere from *S2.033*, the following pollutants in excess of the following specified limits:

- a. NAC 445B.305 The discharge of **VOC** to the atmosphere will not exceed **139.52** pounds per rolling 12-month averaging period.
- b. NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **VOC** to the atmosphere will not exceed **139.52** pounds per rolling 12-month averaging period.
- c. NAC 445B.22017 The opacity from **S2.035** will not equal or exceed **20%**. The opacity must be determined as set forth in 445B.22017.1(a) or (b).
- 3. NAC 445B.3405

Operating Parameters

- a. **S2.035** may store ultra low sulfur (0.0015% sulfur by weight) distillate fuel only.
- b. The maximum throughput will not exceed: **7,500,000** gallons per rolling 12-month period.
- c. **S2.035** may operate **8,760** hours per year.
- 4. NAC 445B.3405
 - a. Monitoring, Record keeping and Compliance

Upon commencement of operations, *the Permittee* will monitor and record in a contemporaneous log, the total distillate fuel throughput for **S2.035** on a monthly basis and calculate the rolling 12-month total.

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Section V. Specific Operating Conditions (continued)

AI. Emission Unit S2.036 - Fuel Storage Tank

UTM: North 4,374.645 km, East 690.192 km (Zone 11)

System 35 Distillate Fuel Storage Tank (Burner Supply)

S2.036 60,000 Gallon Ultra Low Sulfur Distillate Fuel Storage Tank

1. NAC 445B.3405

Air Pollution Control Equipment

S2.036 shall be controlled by a fixed roof and conservation vent valve(s).

S2.036 Tank Dimensions

Tank Height: 60 ft Tank Diameter: 50 ft

2. NAC 445B.3405

Emission Limits

On and after the date of startup of *S2.036 the Permittee* will not discharge or cause the discharge into the atmosphere from *S2.036*, the following pollutants in excess of the following specified limits:

- a. NAC 445B.305 The discharge of **VOC** to the atmosphere will not exceed **34.83** pounds per rolling 12-month averaging period.
- b. NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **VOC** to the atmosphere will not exceed **34.83** pounds per rolling 12-month averaging period.
- c. NAC 445B.22017 The opacity from **S2.036** will not equal or exceed **20%**. The opacity must be determined as set forth in 445B.22017.1 (a) or (b).
- 3. NAC 445B.3405

Operating Parameters

- a. **S2.036** may store ultra low sulfur (0.0015% sulfur by weight) distillate fuel only.
- b. The maximum throughput will not exceed: 3,200,000 gallons per rolling 12-month period.
- c. **S2.036** may operate **8,760** hours per year.
- 4. NAC 445B.3405
 - a. Monitoring, Record keeping and Compliance

Upon commencement of operations, *the Permittee* will monitor and record in a contemporaneous log, the total distillate fuel throughput for **S2.036** on a monthly basis and calculate the rolling 12-month total.

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Section V. Specific Operating Conditions (continued)

AJ. Emission Unit S2.037 - Fuel Storage Tank

UTM: North 4,374.618 km, East 690.192 km (Zone 11)

System 36 Distillate Fuel Storage Tank (Burner Supply)

S2.037 60,000 Gallon Ultra Low Sulfur Distillate Fuel Storage Tank

1. NAC 445B.3405

Air Pollution Control Equipment

S2.037 shall be controlled by a fixed roof and conservation vent valve(s).

S2.037 Tank Dimensions

Tank Height: 60 ft Tank Diameter: 52 ft

2. NAC 445B.3405

Emission Limits

On and after the date of startup of *S2.037 the Permittee* will not discharge or cause the discharge into the atmosphere from *S2.035*, the following pollutants in excess of the following specified limits:

- a. NAC 445B.305 The discharge of **VOC** to the atmosphere will not exceed **34.83** pounds per rolling 12-month averaging period.
- b. NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **VOC** to the atmosphere will not exceed **34.83** pounds per rolling 12-month averaging period.
- c. NAC 445B.22017 The opacity from **S2.037** will not equal or exceed **20%**. The opacity must be determined as set forth in 445B.22017.1(a) or (b).
- 3. NAC 445B.3405

Operating Parameters

- a. **S2.037** may store ultra low sulfur (0.0015% sulfur by weight) distillate fuel only.
- b. The maximum throughput will not exceed: 3,200,000 gallons per rolling 12-month period.
- c. **S2.037** may operate **8,760** hours per year.
- 4. NAC 445B.3405
 - a. Monitoring, Record keeping and Compliance

Upon commencement of operations, *the Permittee* will monitor and record in a contemporaneous log, the total distillate fuel throughput for **S2.037** on a monthly basis and calculate the rolling 12-month total.

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Section V. Specific Operating Conditions (continued)

AK. Emission Units S2.038 and S2.039 - Powdered Activated Carbon Storage Silo A& B for Boiler Units #1 and #2 UTM: North 4,374.718km, East 690.023 km and North 4,374.718 km, East 690.194 km (Zone 11)

System 37	Powdered Activated Carbon Storage Silos for Boiler Unit #1 and Unit #2
S2.038	Powdered Activated Carbon Storage Silo for Boiler Unit #1
S2.039	Powdered Activated Carbon Storage Silo for Boiler Unit #2

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.038** and **S2.039** shall be ducted to control systems consisting of two **Fabric Filters** with 100% capture and a maximum volume flow rate of **600** dry standard cubic feet per minute (dscfm), each. The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

b. Nominal Stack Parameters

Stack Height: 70 ft
Stack Diameter: 0.5 ft
Stack Velocity: 50 ft/sec
Stack Temperature: 68 °F
Volume Flow Rate: 600 dscfm

2. NAC 445B.3405

Emission Limits

- a. On and after the date of startup of S2.038 and S2.039, the Permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of each Fabric Filter, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.051** pound per hour, based on a 3-hour averaging period from each stack. This limit is less than the **51.28** pounds per hour maximum allowable emission limit for each stack as determined from NAC 445.732 and the maximum allowable throughput as limited by **AK.3.a** of this section.
 - (2) NAC 445B.305 The discharge of **PM**₁₀ (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.051** pound per hour for each stack, based on a 3-hour averaging period. This limit is less than the **51.28** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by **AK.3.a** of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **each Fabric Filter** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the exhaust stack of **each Fabric Filter** will not exceed **0.01** grain per dry standard cubic foot, based on a 3-hour averaging period.

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Section V. Specific Operating Conditions (continued)

AK. Emission Unit's S2.038 and S2.039 - Powdered Activated Carbon Storage Silos for Boiler Units #1& #2 (continued)

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for \$2.038 and \$2.039 will not exceed 100 tons of lime per any one-hour period, each.
- b. **S2.038 and S2.039** may operate **8,760** hours per calendar year, each.

4. NAC 445B.3405

a. Monitoring, Testing and Record keeping

Upon commencement of operations, Permittee will:

- (1) Monitor and record the loading rate of lime to **S2.038 and S2.039** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.036 and S2.037** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **each Fabric Filter** while **System 37** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **each Fabric Filter** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Section V. Specific Operating Conditions (continued)

AL. Emission Unit S2.040 and S2.041 – Reclaim Coal Tunnels and Conveyors

UTM: North 4,375.340 km, East 689.533 km (Zone 11) UTM: North 4,375.339 km, East 689.570 km (Zone 11)

System 38 Reclaim Coal Tunnels and Conveyors located below the Coal Storage Dome #1 and #2

S2.040 Reclaim Coal Conveyor and Tunnel for Coal Storage Dome #1
S2.041 Reclaim Coal Conveyor and Tunnel for Coal Storage Dome #2

1. NAC 445B.3405

Air Pollution Control Equipment

b. Emissions from **S2.040** and **S2.041** shall be ducted to a control system consisting of a two **Fabric Filters** with 100% capture and a maximum volume flow rate of **11,000** dry standard cubic feet per minute (dscfm), each. The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

b. Nominal Stack Parameters for each Fabric Filter

Height: 6.0 ft
Diameter: 2.07 ft
Exhaust Temperature: 68 °F
Velocity: 62.20 ft/sec
Volume Flow: 11.000 DSCFM

2. NAC 445B.3405

Emission Limits

- a. On and after the date of startup of **S2.040** and **S2.041**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **the** *Fabric Filters*, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.47** pound per hour, each, based on a 3-hour averaging period. This limit is less than the **90.62** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by **AL.3.a** of this section.
 - (2) NAC 445B.305 The discharge of PM₁₀ (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.47** pound per hour, each, based on a 3-hour averaging period. This limit is less than the **90.62** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by AL.3.a of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **the Fabric Filters** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the exhaust stack of **the Fabric Filters** will not exceed **0.005** grain per dry standard cubic foot, based on a 3-hour averaging period.
- b. New Source Performance Standards Subpart Y Standards of Performance for Coal Preparation Plants (40 CFR Part 60.250) On and after the sixtieth day after achieving the maximum production rate at which **S2.040** and **S2.041** will be operated, but not later than 180 days after initial startup, *the Permittee* will not discharge or cause the discharge into the atmosphere from **S2.040** and **S2.041** the following pollutants in excess of the following specified limits:
 - (1) Emissions that exhibit equal to or greater than 20 percent opacity (40 CFR Part 60.252(c))
 - (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c))
 - (3) At all times, including periods of startup, shutdown, and malfunction, *the Permittee* shall, to the extent practicable, maintain and operate **S2.040 and S2.041** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d))

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Section V. Specific Operating Conditions (continued)

AL. Emission Unit S2.040 and S2.041 - Reclaim Coal Tunnels and Conveyors (continued)

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for **S2.040 and S2.041, combined,** will not exceed **2600.0** tons of coal per any one-hour period (up to 2,600 ton per hour of coal for each tunnel and conveyor, or any combination of both not to exceed 2,600 ton per hour total).
- b. **S2.040** and **S2.041** may operate **8,760** hours per calendar year.

4. NAC 445B.3405

a. Monitoring, Testing and Record keeping

Upon commencement of operations, *Permittee will*:

- (1) Monitor and record the loading rate of coal to **S2.040** and **S2.041** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.040** and **S2.041** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **Fabric Filters** while **System 38** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **the Fabric Filters** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.

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Section V. Specific Operating Conditions (continued)

AL. Emission Unit \$2.040 and \$2.041 - Reclaim Coal Tunnels and Conveyors (continued)

5. NAC 445B.3405

- a. **NSPS Subpart Y Compliance Requirements -** *The Permittee* shall comply with 40 CFR Part 60, Subpart Y by complying with the following conditions:
 - (1) *The Permittee* shall submit a notification of the date construction of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form. (40 CFR §60.7(a)(1))
 - (2) *The Permittee* shall submit a notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date. (40 CFR §60.7(a)(3))
 - (3) *The Permittee* shall submit a notification of the anticipated date for conducting the opacity observations required by §60.11(e)(1). The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date. (40 §60.7(a)(6))
 - (4) *The Permittee* shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of **System 38**. (40 CFR §60.7(b))
 - (5) Compliance with NSPS Subpart Y opacity standards shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60 or any alternative method that is approved by the Administrator. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test. (40 CFR §60.11(b))
 - (6) Opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. *The Permittee* shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. (40 CFR §60.11(e)(1))
 - (7) Except as provided in **AL.5.a.(8)** of this section, *the Permittee* shall conduct opacity observations in accordance with **AL.5.a.(5)** of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results. The inability of *the Permittee* to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations. (40 CFR §60.11(e)(2))
 - (8) *The Permittee* may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. *The Permittee* shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the opacity testing notification required in §60.7(a)(6). (40 CFR §60.11(e)(3))

*********End of Specific Operating Conditions********

BUREAU OF AIR POLLUTION CONTROL

Facility ID No. A0765 Permit No. AP4911-2241

CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

Issued to: SIERRA PACIFIC RESOURCES COMPANY, ELY ENERGY CENTER, as Permittee

A. No Emission Caps Defined.

*********End of Emission Caps********

BUREAU OF AIR POLLUTION CONTROL

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Section VIII. Surface Area Disturbance Conditions

Surface area disturbance in excess of 20 acres.

A. State Implementation Plan (SIP) Article 7.3

The permittee may not cause or permit the construction, repair, or demolition work, or the use of unpaved or untreated areas without applying all such measures as may be required by the Director to prevent particulate matter from becoming airborne.

- B. The permittee will control fugitive dust in accordance with the dust control plan entitled "Dust Control Plan", as submitted on October 24, 2007.
- C. NAC 445B.22037

Fugitive Dust

- 1. The permittee may not cause or permit the handling, transporting, or storing of any material in a manner which allows or may allow controllable particulate matter to become airborne.
- 2. Except as otherwise provided in subsection 4, the permittee may not cause or permit the construction, repair, demolition, or use of unpaved or untreated areas without first putting into effect an ongoing program using the best practical methods to prevent particulate matter from becoming airborne. As used in this subsection, "best practical methods" includes, but is not limited to, paving, chemical stabilization, watering, phased construction, and revegetation.
- 3. Except as provided in subsection 4, the permittee may not disturb or cover 5 acres or more of land or its topsoil until the permittee has obtained an Permit to construct for surface area disturbance to clear, excavate, or level the land or to deposit any foreign material to fill or cover the land.
- 4. The provisions of subsections 2 and 3 do not apply to:
 - a. Agricultural activities occurring on agricultural land; or
 - b. Surface disturbances authorized by a permit issued pursuant to NRS 519A.180 which occur on land which is not less than 5 acres or more than 20 acres.

D. NAC 445B.305 Federally Enforceable PSD Permit BACT Requirement

Fugitive Dust Air Pollution Control Equipment

- 1. The Permittee shall install and continuously operate and maintain the following air pollution controls:
 - a. Facility Roads With the exception of roads at the solid waste disposal facility, all facility roads shall be paved and controlled with water sprays and/or sweeping. Roads at the solid waste disposal facility shall be controlled with gravel and/or chemical suppressants.
 - b. Active Coal Storage Piles All active coal storage piles shall be controlled with water sprays.
 - c. Inactive Coal Storage Piles All inactive coal storage piles shall be controlled by surface sealants (crusting agents).
 - d. <u>Emergency Coal Storage Pile</u> The emergency coal storage pile shall be controlled by water sprays.
 - e. <u>Solid Waste Disposal Facility</u> Inactive areas of the on-site solid waste disposal facility shall be controlled by surface sealants (crusting agents). Active areas of the on-site solid waste disposal facility shall be controlled by water sprays.

*********End of Surface Area Disturbance Conditions *********

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Section IX. Amendments

NA

This Permit to construct:

- 1. Is non-transferable. (NAC 445B.287)
- 2. Will be posted conspicuously at or near the stationary source. (NAC 445B.318)
- 3. Will expire if construction is not commenced within 18 months after the date of issuance or if construction of the facility is delayed for 18 months after initiated. (NAC 445B.3366)
- 4. Will expire if a complete application for a Class I operating permit or modification of an existing Class I operating permit is not submitted within 12 months after the initial start-up. (NAC 445B.3366)
- 5. Any party aggrieved by the Department's decision to issue this permit may appeal to:
 - a) The State Environmental Commission (SEC) within ten days after the date of notice of the Department's action. (NRS 445B.340)
 - b) The United States Environmental Protection Agency's Environmental Appeals Board (EAB). The provisions in 40 CFR 124.19 shall apply to appeals made to the EAB for this PSD Operating Permit to Construct.
- 6. The Permittee shall submit a complete Class I application within 12 months after the notification date of commencement of operation as required in this permit to construct. (NAC 445B.3361)
- 7. The effective date of the permit is 30 days after service of notice to the applicant and commenters of the final decision to issue, modify, or revoke and reissue the permit, unless review is requested on the permit under 40 CFR 124.19 within the 30 day period.
- 8. If an appeal is made to the EAB, the effective date of the permit is suspended until such time as the appeal is resolved.

THIS PERMIT EXPIRES ON: PROPOSED

Signature

Issued by: Matthew A. DeBurle, P.E.

Supervisor, Class I Permitting Branch Bureau of Air Pollution Control

Phone: (775) 687-9391 Date:

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BUREAU OF AIR POLLUTION CONTROL

Facility ID No. A0765 Permit No. AP4911-2241

CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

Issued to: SIERRA PACIFIC RESOURCES COMPANY, ELY ENERGY CENTER, as Permittee

Class I Non-Permit Equipment List

Appended to \$\$ #APXXX-XXXX

Emission Unit #	Emission Unit Description
IA1.xxx	{Emergency Generator}
IA1.xxx	

Note: The equipments listed on this attachment are subject to all applicable requirements of the NAC and ASIP.